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ANNUAL REPORT

OF THE

CITY ENGINEER

OF THE

CITY OF MINNEAPOLIS

FOR THE

YEAR ENDING DECEMBER 31, 1900.

G W. SUBLETTE, - - - City Engineer.

MINNEAPOLIS:
Harrison & Smith Co., Printers,
1901.

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CITY ENGINEER'S DEPARTMENT.

G. W. SUBLETTE,
City Engineer.

ELLIS R. DUTTON,
Ass't City Engineer.

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ASTOR, LENOX AND
TILDEN FOUNDATIONS
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STREET AND OFFICE DIVISION.

W. M. FOX,
Engineer.

W. F. DEALING,
Sidewalk Engineer,

B. H. DURHAM,
Transitman.

WALTER WALSH,
R. FOX,
ROB'T COMSTOCK,
STANLEY BEZOIER,
Levelmen.

JOHN BURKE,
ED. LONG,
D. C. BOW,
E. N. NASH,
CHAS. WILLIAMS,
Rodmen.

T. S. DICKEY,
Assessment Clerk.

W. S. PARDEE,
Conduit Inspector.

DAVID JAMESON,
Paving Inspector.

J. E. CARROLL,
Ass't Street Engineer.

R. L. COX,
Chief Clerk.

J. R. GRAY,
Permit Clerk.

R. J. STARK,
Bookkeeper.

N. M. BURNS,
Stenographer.

MRS. W. D. VanDUZEE,
ANDREW ERICKSON,
Clerks.

C. S. GETZ,
T. D. ARMSTRONG,
M. F. CRAHEN,
N. P. TINKHAM,
P. MARTINSON,
Sidewalk Inspectors,

JOHN DOWNS,
Curb Inspector.

SEWER DIVISION.

CARL ILSTRUP,
Engineer,

W. L. AMY,
Draughtsman.

T. DEACON,
Chief Inspector.

C. B. REESE,
L. E. STRUM,
G. A. HARVEY,
C. B. HATCH,
SWAN JOHNSON,
Sewer and Water Connection Inspectors.

N. J. LUND,
Ass't Engineer.

F. N. BURSELL,
Rodman.

AUGUST RYDH,
CHAS. JUSTER,
Timekeepers.

M. E. SLEEPER,
Street Foreman.

H. C. GERDES,
Cement Inspector.

BRIDGE AND BUILDING DIVISION.

K. OUSTAD,
Engineer,

SAM'L CRAIG,
Inspector

WATER WORKS DIVISION.

W. W. REDFIELD,
Engineer.

G. BOGERT,
Draughtsman.

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Historical.

In 1838, Franklin Steele erected his claim shanty on the eastern shore of the Mississippi river, opposite the Falls of St. Anthony. Seven years later, or in 1845, the first permanent house was erected in St. Anthony by Pierre Bottineau. The same year the city of St. Anthony was incorporated, and Hon. H. T. Welles elected the first mayor.

In 1849 the west shore of the Mississippi at the falls was a military reservation, and hence settlement was not permitted. But at the session of congress of that year two ex-soldiers of the Mexican war—Hon. Robert Smith, of Illinois, and Col. John H. Stevens—were, by special act, allowed to make settlement on the reserve, and the former located his claim so as to take in the falls, while the latter built his house on the hillside where the unitn station now stands, and near the spot where the western end of the suspension bridge was to terminate four or five years afterwards, and where the steel arch bridge is now located.

In 1854 the act was passed and became a law, throwing open to settlement the reservation west of the Mississippi river and the "squatters" were allowed to purchase the lands upon which they had settled at the uniform government price of $1.25 per acre. At the election that year seventy-five votes were cast, and the population was estimated at two hundred. In the fall of the same year the town was christened, the name "Minneapolis" having been suggested by Mr. Charles Hoag, a gentleman who lived to a ripe old age in the vicinity of this city, dying in March, 1888.

In 1854 the city of Minneapolis (west division) was platted, and before the close of that year boasted of a permanent population of 1,000 people. In 1857 the population had increased to about 2,000, and there was a tremendous rivalry between the two hamlets—St. Anthony and Minneapolis. In 1858 Minneapolis was vested with its first town or village government, but did not assume the responsibility of a full grown municipality until 1867.

Minneapolis and St. Anthony were rivals for commercial and manufacturing supremacy for more than twenty years, but finally in 1873 joined their fortunes under one name and one municipal government, and have since been known to the world as the progressive city of Minneapolis with an area of fifty-three square miles, or 33,920 acres, and with a population in 1900 of 202,718.

Summary City Officers, 1881 to 1900.

OFFICERS.	Elected April 5, 1881—Roman. Hold overs in *Italics.*	Elected April 4, 1882—Roman. Hold overs in *Italics.*	Elected April 3, 1883—Roman. Hold overs in *Italics.*	Elected April 1, 1884—Roman. Hold overs in *Italics.*
Mayor	*A. C. Rand*	A. A. Ames	*A. A. Ames*	G. A. Pillsbury.
Comptroller	*Wm. B. Hill*	Wm. B. Hill	*Wm. B. Hill*	Sam Goodnow.
City Treasurer	T. J. Buxton	*T. J. Buxton*	T. J. Buxton	*T. J. Buxton.*
City Clerk	Selah Mathews	*Selah Mathews*	Selah Mathews	*Selah Mathews.*
City Attorney	R. C. Benton	C. H. Benton	C. H. Benton	Judson N. Cross.
City Engineer	Andrew Rinker	Andrew Rinker.	Andrew Rinker	Andrew Rinker.
Ald. 1st ward	*M. W. Glenn*	*Anton Grethen*	*B. F. Nelson*	*M. W. Glenn.*
	Anton Grethen	*B. F. Nelson*	*M. W. Glenn*	*E. F. Comstock.*
	B. F. Nelson	M. W. Glenn	E. F. Comstock	John Fleetham.
Ald. 2d ward	*J. H. Gilmore*	*W. M. Burrows.*	*T. F. Andrews*	*C. A. Coe.*
	W. M. Barrows	*T. F. Andrews*	*C. A. Coe*	*E. M. Johnson.*
	T. F. Andrews	*C. A. Coe*	E. M. Johnson	F. C. Barrows.
Ald. 3d ward	*J. W. Anderson*	*Mathias Kees*	*Daniel Waitt*	*E. Eichhorn.*
	Mathias Kees	*Daniel Waitt*	*E. Eichhorn.*	*Chas. Hashow.*
	Daniel Waitt	E. Eichhorn	Chas. Hashow	Robert Pratt.
Ald. 4th ward	*Frank Beebe*	*F. S. Gilson*	*G. S. Cleveland*	*H. C. Morse.*
	F. S. Gilson	*G. S. Cleveland*	*H. C. Morse*	†*F. L. Greenleaf.*
				‡Emerson Cole.
	G. S. Cleveland	Henry C. Morse.	F. L. Greenleaf	William W. Sly.
Ald. 5th ward	*J. M. Parker*	*Fred. L. Smith*	*C. W. Clark*	¶S. C. Cutter.
	Fred. L. Smith	*C. W. Clark*	*Jas. M. Parker*	*Jas. M. Parker.*
	C. W. Clark	Jas. M. Parker	*G. A. Pillsbury.	C. W. Clark.
Ald. 6th ward	*Joseph Holscher*	*Matt Walsh*	*A. C. Haugan*	*Joseph Holscher.*
	Matt Walsh	*A. C. Haugan*	*Joseph Holscher*	*Matthew Walsh.*
	A. C. Haugan	Jos. Holscher	Matthew Walsh	A. C. Haugan.
Ald. 7th ward			N. H. Roberts (2)	*N. H. Roberts.*
			A. Noerenberg (3)	*A. J. Noerenberg.*
Ald. 8th ward			S. P. Channel (2)	§*S. P. Channel.*
				‖Geo. W. Cooley.
			A. Lawrence (3)	*Albert Lawrence.*
Ald. 9th ward				
Ald. 10th ward				
Ald. 11th ward				
Ald. 12th ward				
Ald. 13th ward				

Summary City Officers, 1881 to 1900.—Continued.

Elected April 7, 1885—Roman Hold overs in *Italics.*	Elected April 6, 1886—Roman. Hold overs in *Italics.*	Elected April 5, 1887—Roman. Hold overs in *Italics.*	Elected Nov. 6, 1888—Roman.	Elected Nov. 4, 1890—Roman. Hold overs in *Italics.*
Geo. A. Pillsbury	A. A. Ames	A. A. Ames	E. C. Babb	Philip B. Winston.
Sam. Goodnow	F. G. Holbrook	*F. G. Halbrook*	John F. Calderw'd	Solon Armstrong.
E. H. Moulton	*E. H. Moulton*	*E. H. Moulton*	E. H. Moulton	Krist'n Kortga'rd.
Selah Mathews	*Selah Mathews*	C. A. Cornman	CHAS. F. HANEY	CHAS. F. HANEY.
Judson N. Cross.	*Judson N. Cross*	Seagrave Smith	ROBT. D. RUSSELL	ROBT. D. RUSSELL.
Andrew Rinker.	*Andrew Rinker*	Andrew Rinker	ANDREW RINKER.	ANDREW RINKER.
E. F. Comstock	*John Fleetham*	*Titus Mareck*	J. T. McGowan (4)	Jos. Ingenhutt (4).
John Fleetham	*Titus Mareck*	*E. J. L'Herault*	J. Ingenhutt (2)	*J. T. McGowan.*
Titus Mareck	E. J. L'Herault	C. A. Hanscom	F. Brueshaber Jr 2	
E. M. Johnson	*F. C. Barrows*	*D. M. Clough*	E. M. Johnson (4)	J. C. Haynes (4).
F. C. Barrows	*D. M. Clough*	*E. M. Johnson*	F. C. Barrows (2)	F. C. Barrows (2).
D. M. Clough	E. M. Johnson	F. C. Barrows	V. M. Smith (2)	
Chas. Hashow	*Robert Pratt*	*W. H. Mills.*	G. A. Durnam (4).	Jos. L. Kiichli (4).
Robert Pratt	*E. Eichhorn* (a).	John A. Gilman	C. P. Engstad (2)	*Geo. A. Durnam.*
E. Eichhorn	W. H. Mills	Wm. McArdle	J. A. Gilman (2)	
Emerson Cole.	*W. W. Sly*	*H. C. Morse*	E. G. Potter (4)	*E. G. Potter.*
W. W. Sly	*H. C. Morse*	*B. Cloutier*	Emerson Cole (2)	Sam'l B. Loye (4).
....	....	....	....	
H. C. Morse	B. Cloutier	Emerson Cole	S. B. Loye (2)	
S. C. Cutter	*C. W. Clark*	*Thos. Downs*	C. P. Lovell (4)	*Chas. P. Lovell.*
C. W. Clark	*Thos. Downs*	*Alonzo Phillips*	H. W. Brazie (2)	H. W. Brazie (4).
Thomas Downs	Alonzo Phillips	C. W. Clark	Thos. Downs (2)	
Matthew Walsh	*A. C. Haugan*	*Jacob Stoft*	Sam'l Hunter (4)	*Sam'l Hunter.*
A. C. Haugan	*L. Swenson* (b)	J. M. Gleason	C. Ellingson (2)	Lars M. Rand (4).
Lars Swenson	Jacob Stoft	Clar. Johnson	J. A. Swanson (2).	
A. J. Noerenberg.	*Phineas Phelps*	*E. T. Gibson*	J. H. Parry (4)	*J. H. Parry.*
Phin's Phelps (2)	*E. T. Gibson*	*Thos. P. Dwyer*	J. M. Meloy (2)	M. B. Rollins (4*d*).
E. T. Gibson (3).	Thos. P. Dwyer.	A. J. Noerenberg	Ole P. Flaten (2)	
A. Lawrence	*E. C. Babb*	*Geo. W. Cooley*	Melvin Grimes (4)	*Melvin Grimes.*
....	....	....	....	G. W. Flanders (4)
E. C. Babb (2)	*Geo. W. Cooley*	*A. Lawrence.*	J. C. Sterling (2)	
G. W. Cooley (3)	A. Lawrence	O. A. Stoneman	D.G.Thompson (2)	
....	....	Robert Ervin	J. H. Bradish (4)	*J. H. Bradish.*
....	....	John Kerr.	Erik Rhode (2)	J. J. McGuire (4).
....	....	Herman Vogt	Herman Vogt (2)	
....	....	Vincent Reeves	Vincent Reeves (4)	*Vincent Reeves.*
....	....	Henry Oswald	W. J. Bursell (2)	F. A. Schwartz(4).
....	....	....	B. H. Billings (2)	
....	....	*Lars Swenson*	J. A. Blichfeldt (4)	*J. A. Blichfeldt.*
....	....	J. D. Muldoon	J. W. Phillips (2)	Wm. H. Lackey(4)
....	....	J. L. Johnson	O. A. Fultz (2)	
....	....	Caleb Tingley	W.B.Wooward(*d*2)	*W.B.Woodw'rd* (*d*)
....	....	J. L. Parker	J. E. Vandew'er(2)	Geo. Peterson (4).
....	....	....	A. S. Adams (2)	
....	....	C. C. Garvey.	D.D.Farnsworth(4	*D. D. Farnsworth.*
....	....	A. F. Nichols.	G. H. Warren (2)	
....	....	....	J. S. Gray (2)	J. S. Gray (4).

---

*Elected Mayor April 1, 1884; resigned as alderman of Fifth ward April 2, 1884.
†Resigned Feb. 25, 1884. ‡Elected March 15, 1884. §Resigned Feb. 27, 1884.
‖Elected March 15, 1884. ¶Elected at special election held April 19, 1884, to fill vacancy occasioned by the resignation of Geo. A. Pillsbury.

(*a*) Resigned March 10, 1887, to take effect March 25, 1887. (*b*) By act of legislature transferred to Eleventh ward for the unexpired part of his term. (*c*) Died Aug. 18, 1889, and Dr. F. E. Hansen elected Sept. 10, 1889, to fill the unexpired term of D. G. Thompson. (*d*) By act of legislature changing boundary lines of the Seventh and Twelfth wards, Wm. B. Woodward was made to represent the Seventh ward and M. B. Rollins to represent the Twelfth ward.

Figures in parentheses, after names, thus (2), denotes the number of years in term. By an act of legislature the term of all city officers holding over, and all those elected April 5, 1887, expires on the first Monday in January, 1889. Terms of all officers elected Nov. 6, 1888, to commence on the first Monday in January, 1889.

(*e*) City Clerk, City Engineer and City Attorney are appointed by the City Council for two years.

Summary City Officers, 1881 to 1900.—Continued.

OFFICERS.	Elected Nov.8, 1892—Roman. Hold overs in *Italics*.	Elected Nov.6, 1894—Roman. Hold overs in *Italics*.
Mayor.	William H. Eustis	Robert Pratt.
Comptroller.	Wallace G. Nye	Wallace G. Nye.
City Treasurer	A. C. Haugan	A. C. Haugan.
City Clerk.	Chas. F. Haney	Chas. F. Haney.
City Attorney	David F. Simpson	David F. Simpson.
City Engineer,	F. W. Cappelen	F. W. Cappelen.
Ald. 1st ward	Perry A. Long (4)	Roman Alexander (4).
	Jos. Ingenhutt (2)	*Perry. A. Long* (2).
Ald. 2d ward	Fred B. Snyder (4)	Burke F. O'Brien (4).
	Jas. C. Haynes (2)	*Fred B. Snyder* (2).
Ald. 3d ward	Hugh Jennings (4)	Geo. A. Durnam (4).
	Jos L Kiichli (2)	*Hugh Jennings* (2).
Ald. 4th ward	Sam. E. Adams (4)	S. B. Loye (4).
	S. B. Loye (2)	*Sam. E. Adams* (2).
Ald. 5th ward	F. C. Harvey (4)	Wyman Elliot (4).
	H. W. Brazie (2)	*F. C. Harvey* (2).
Ald. 6th ward	Andrew Anderson (4)	Lars M. Rand (4).
	Lars M. Rand (2)	*Andrew Anderson* (2).
Ald. 7th ward	J. A. Nordeen (4)	Norman I. Colburn (4).
	W. B. Woodward (2)	*J. A. Nordeen* (2).
Ald. 8th ward	Julius E. Miner (4)	Seth M. Hewett (4).
	Geo. W. Flanders (2)	*Julius E. Miner* (2).
Ald. 9th ward	Jas. H. Bradish (4)	Erik Rhode (4).
	John J. McGuire (2)	*Jas. H. Bradish* (2).
Ald. 10th ward	P. W. McAllister (4)	Fred. A. Schwartz (4).
	Fred A Schwartz (2)	*P. W. McAllister* (2).
Ald. 11th ward	A. L. Skoog (4)	J. W. Phillips (4).
	Wm. H. Lackey (2)	*A. L. Skoog* (2).
Ald. 12th ward	*M. B. Rollins* (2)	Francis G. Drew (4).
	Geo. Peterson (2)	*Chas. E. Dickinson* (2).
Ald. 13th ward	Albert Currier (4)	G. L. Fort (4).
	James S. Gray (2)	*Albert Currier* (2).

Summary City Officers, 1881 to 1900.—Continued.

OFFICERS.	Elected Nov. 3, 1896–Roman. Hold overs in *Italics.*	ElectedNov.8,1898–Roman. Hold overs in *Italics.*
Mayor	Robert Pratt	James Gray.
Comptroller	Wallace G. Nye	Joshua Rogers.
City Treasurer	*A. C. Haugan	C. S. Hulbert.
	†C. S. Hulbert	
City Clerk	L. A. Lydiard	L. A. Lydiard.
City Attorney.	Frank Healy	Frank Healy.
City Engineer	F. W. Cappelen	G. W. Sublette.
Ald. 1st ward.	Perry A. Long (4)	Jacob Foell (4).
	Roman Alexander (2)	*Perry A. Long* (2).
Ald. 2d ward	J. S. Lane (4).	E. C. Chatfield (4).
	Burke F. O'Brien (2)	*J. S. Lane* (2).
Ald. 3d ward	J. L. Kiichli (4)	H. N. Leighton (4).
	‡*Geo. A. Durnam* (2)	*Jos. L. Kiitchli* (2).
Ald. 4th ward	Sam E. Adams (4)	Alfred E. Merrill (4)
	Samuel B. Loye (2)	*Sam E. Adams* (2).
Ald. 5th ward	John Crosby (4)	D. P. Jones (4).
	Wyman Elliott (2)	*John Crosby* (2).
Ald. 6th ward	Andrew Anderson (4)	Lars M. Rand (4).
	Lars M. Rand (2)	*Andrew Anderson* (2).
Ald. 7th ward.	O. H. Shepley (4)	J. F. Main (4).
	Norman I. Colburn (2)	*O. H. Shepley* (2).
Ald. 8th ward	§Edward E. Webster (4)	Alexander McCune (4).
	Seth M. Hewett (2)	‖*Fred M. Powers* (2).
Ald. 9th ward	M. B. Lloyd (4)	Peter McCoy (4).
	Erik Rhode (2)	*M. B. Lloyd* (2).
Ald. 10th ward	James Dwver (4)	John Sibley (4).
	Fred A. Schwartz (2)	*Jas. Dwyer* (2).
Ald. 11th ward	Peter Nelson (4)	Claus O. Peterson (4).
	Jay W. Phillips (2)	*Peter Nelson* (2).
Ald. 12th ward	Chas. E. Dickinson (4)	Geo. S. Castle (4).
	Francis G. Drew (2)	*Chas. E. Dickinson* (2).
Ald. 13th ward	Albert Currier (4)	O. P. Sutherland (4).
	G. L. Fort (2)	*Albert Currier* (2).

---

*Resigned January 27th, 1897.

‡Resigned July 8th, 1898.

†Appointed by City Council March 12th, 1897, to fill vacancy caused by the resignation of A. C. Haugan.

§Resigned Aug. 26th, 1898.

‖Elected at general municipal election held Nov. 8th, 1898, to fill vacancy occasioned by the resignation of Edward E. Webster.

Election of Aldermen.

AN ACT, to amend Section One, Chapter Two of the Charter of the City of Minneapolis, enacted by the Legislature of the State of Minnesota, and approved April 3d, A. D. 1889.

Section 1. The elective officers of the City of Minneapolis shall be a mayor, a treasurer, a comptroller, members of the City Council and the members of such other boards as this charter shall create and declare to be elective officers of the city.

The City Council shall consist of three (3) aldermen from each ward in the city until the first (1) Monday in January, one thousand eight hundred and ninety-one (1891), and thereafter shall consist of two (2) aldermen from each ward, to be elected by the qualified voters in their respective wards.

The aldermen shall each hold office for the term of four (4) years from and after the first (1st) Monday in January next following his election, provided that the aldermen who were elected at the general election held in November, one thousand eight hundrd and eighty-eight (1888) and qualified under such election, shall continue in office until the expiration of the term for which they were elected.

At the general election to be held in November, one thousand eight hundred and ninety (1890), and at each general election held every two years thereafter, there shall be elected one (1) alderman from each ward, to serve for the term of four (4) years from the first (1st) Monday in January next following his election.

City Officers, 1900.

ELECTIVE.

Mayor	James Gray
Treasurer	C. S. Hulbert
Comptroller	Joshua Rogers
Municipal Judge	Andrew Holt
Special Municipal Judge	Wm. A. Kerr
Justice of the Peace, East District	F. E. Hobbs
Justice of the Peace, North District,	Charles E. Bond
Justice of the Peace, South District	S. J. Beardslee

City Council.

OFFICERS OF COUNCIL.

President	John Crosby
Vice-President	D. P. Jones
City Clerk	L. A. Lydiard

ALDERMEN.

First Ward	Jacob Foell, Perry A. Long
Second Ward	E. C. Chatfield, J. S. Lane
Third Ward	H. N. Leighton, J. L. Kiichli
Fourth Ward	A. E. Merrill, Sam E. Adams
Fifth Ward	D. P. Jones, John Crosby
Sixth Ward	Lars M. Rand, Andrew Anderson
Seventh Ward	J. F. Main, O. H. Shepley
Eighth Ward	Alexander McCune, Fred M. Powers
Ninth Ward	Peter McCoy, M. B. Lloyd
Tenth Ward	John Sibley, James Dwyer
Eleventh Ward	Claus O. Peterson, Peter Nelson
Twelfth Ward	Geo. S. Castle, Chas. E. Dickinson
Thirteenth Ward	O. P. Sutherland, Albert Currier

APPOINTIVE.

City Attorney	Frank Healy
City Clerk	L. A. Lydiard
City Assessor	G. L. Fort
City Engineer	G. W. Sublette
Chief Engineer of Fire Department	J. R. Canterbury
Superintendent of Police	James G. Doyle
Commissioner of Health	A. K. Norton, M. D.
Inspector of Buildings	James G. Houghton
Inspector of Gas	W. H. Roberts
Registrar of Water Works	F. T. Moody
Sealer of Weights and Measurers	R. L. Whitney
Supervisor of Water Works	J. H. McConnell
Custodian	Frank T. Gaylord

Street Commissioners.

First Ward	Casper Schulenberg
Second Ward	J. H. Brown
Third Ward	G. W. Wales
Fourth Ward	Robt. McMullen
Fifth Ward	J. M. Cole
Sixth Ward	Mathew Walsh
Seventh Ward	D. J. McNiven
Eighth Ward	L. C. Fry
Ninth Ward	T. F. Smith
Tenth Ward	Wm. Knight
Eleventh Ward	Andrew Thirkeldsen
Twelfth Ward	A. T. Larson
Thirteenth Ward	Henry W. Weber

The Street Commissioners are appointed by the City Council for a term of one year.

Standing Committees of the City Council, 1899-1900.

Ways and Means—Merrill, Lloyd, Adams, Dickinson, Kiichli.
Salaries—Kiichli, Dickinson, Lloyd, Sutherland, Anderson.
Claims—McCune, Adams, Chatfield, Rand, Long.
Taxes—Adams, Chatfield, Currier, Dickinson, Kiichli.
Licenses—Peterson, Jones, Merrill, Long, McCoy.
Bonds of City Officers—Anderson, McCune, Peterson, Dickinson, McCoy.
Accounts of City Officers—Foell, Lane, Sibley, Sutherland, Castle.
Public Grounds and Buildings—Currier, Powers, Main, Leighton, Rand.
Roads and Bridges—Lane, Leighton, Sibley, Anderson, Shepley.
Street Grades and Additions—Powers, Sutherland, Jones, Dwyer, Nelson.
Fire Department—Leighton, Lloyd, McCune, Lane, Shepley.
Water Works—Jones, Merrill, Lane, McCune, Nelson.
Gas—Dwyer, Chatfield, Powers, Sutherland, Kiichli.
Sewers—Sutherland, Powers, Peterson, Long, Castle.
Markets—Shepley, Powers, Merrill, Sibley, McCoy.
Printing—Sibley, Main, Anderson, Foell, Nelson.
Railroads—Dickinson, Chatfield, Leighton, Main, Foell.
Police—Nelson, Adams, Jones, Lloyd, Shepley.
Paving—Main, Lane, Currier, Peterson, Dwyer.
Underground Wires—McCoy, Main, Sibley, Castle, Foell.
Health and Hospitals—Lloyd, Merrill, Jones.
Cancellation—Castle, Peterson, Dwyer.
Ordinances—Chatfield, McCune, Rand.
Rules—Long, Adams, Main.
Bethany Home—Rand, Adams, Currier.

Board of Park Commissioners.

William W. Folwell	President
Abraham S. Adams	Vice-President
J. A. Ridgway	Secretary
C. S. Hulbert	Treasurer
C. J. Rockwood	Attorney
W. M. Berry	Superintendent
F. H. Nutter	Engineer

Terms Expiring 1901.

William W. Folwell,
Samuel Hunter,
*Chas. H. Woods,
Portius C. Deming.

Terms Expiring 1903.

Geo. T. D. Baxter,
Charles J. Johnson,
Fred L. Smith,
Joseph C. Young.

Terms Expiring 1905.

Abraham S. Adams,
†Edward M. Bartlett,
‡Howard M. DeLaittre,
John S. Dodge,
Harry W. Jones.

Ex-Officio Members.

James Gray, Mayor.
J. S. Lane, Chairman Council Committee on Roads and Bridges.
Albert Currier, Chairman Council Committee on Public Grounds and Buildings.

*Died April 16, 1899.
†Died February 14, 1899.
‡Appointed to fill vacancy occasioned by the death of E. M. Bartlett.

Board of Education.

Thos. F. Quinby	President
John A. Schlener	Secretary
C. S. Hulbert	Treasurer
H. B. Marchbank	Clerk
C. M. Jordan, Ph. D.	Superintendent of Schools
Wm. Duncan	Superintendent of Buildings

N. F. Hawley,
F. D. McMillan,
M. Falk Gjertsen,
Thos. F. Quinby,
W. K. Hicks,
*F. H. Peavey,
John A. Schlener,

*Resigned.

Board of Court House and City Hall Commissioners.

*E. M. Johnson	President
Titus Mareck	Vice-President
Lars Swenson	Treasurer
Chas. P. Preston	Secretary
Long & Kees	Architects
Daniel Fish	Attorney

Wm. D. Washburn,
John C. Oswald,
Oliver T. Erickson,
David M. Clough,
Titus Mareck,
John Swift,
Robert Pratt,
Wm. C. Chowen,
Lars Swenson,
Geo. A. Brackett,
Edgar F. Comstock,
*Edward M. Johnson.

*Resigned.

Board of Charities and Corrections.

HON. JAMES GRAY, Mayor, Member Ex-Officio.

JOHN G. MOORE	President
R. P. PRATT	Secretary

F. R. WOODARD. J. H. MARTIN. GEO. E. NORTON.

Department of Health.

HON. JAMES GRAY, Mayor Ex-Officio.

COUNCIL COMMITTEE.

Alderman M. B. LLOYD, Chairman. Alderman A. E. MERRILL.
Alderman D. P. JONES.
A. K. NORTON, M. D., Commissioner of Health.

EMPLOYEES.

EDWINA J. PECK, Clerk and Registrar of Vital Statistics. ....

Medical Inspectors.

W. H. HANSCOM, M. D. W. G. W. TUPPER, M. D.
C. W. WILLIAMS, M. D.

Sanitary Inspectors.

J. S. WOODBURY,
J. H. CROSBY,
H. A. LUXTON,
A. J. LUNT,
J. O'DONNELL.
C. E. BROWN,
C. A. NELSON,

Quarantine Hospital.

JOHN WILSON, Superintendent. HANNAH WILSON, Matron.
J. W. STOKES, Dump Police.

C. W. DREW, M. D	Chemist
C. E. COTTON, V. M. D	Veterinarian
J. F. CORBETT	Bacteriologist
W. S. GAINES	Dairy Inspector
M. J. SEXTON	Dairy Inspector
W. D. MCCALL	Inspector of Bread
C. A. TILBURY	Inspector of Meat
T. B. WALKER	President
DANIEL FISH	Secretary

Library Board.

A. L. CROCKER, S. C. GALE, E. M. JOHNSON, S. R. KITCHEL.
JAMES KENDALL HOSMER, Librarian.

Members Ex-Officio.

JAMES GRAY	Mayor
CYRUS NORTHROP	President State University
THOS. F. QUINBY	President Board of Education

Salaries Fixed by City Council.

SCHEDULE OF SALARIES FOR 1899-1900.

	Per annum.
City Attorney	$4,100.00
First Assistant	1,825.00
Second Assistant	1,250.00
Third Assistant	1,200.00
Stenographer	600.00
City Treasurer	5,000.00
Cashier	1,200.00
Bookkeeper	1,200.00
City Comptroller	3,000.00
Assistant City Comptroller	1,450.00
Clerk	1,000.00
Assistant City Clerk, Official Reporter, Stenographer and Clerks in City Clerk's Office	4,740.00
Mayor's Secretary	100.00
Sealer of Weights and Measures	800.00
City Weighmaster	600.00
City Weigher	720.00
Thirteen Street Commissioners, each	900.00
One Watchman, Steel Arch Bridge	500.00
Four Bridge Watchmen, each	400.00
City Assessor	2,700.00
Assistant City Assessor	1,300.00
Deputy Assessors, not to exceed, per day	4.00
Inspector of Buildings	2,000.00
First Assistant Inspector of Buildings	1,200.00
Second Assistant Inspector of Buildings, per day	2.50
Electrical Inspector	1,200.00
Plumbing Inspector	1,000.00
Elevator Inspector	1,000.00
Clerk	720.00
Janitor, Municipal Court	600.00
Assistant Janitor Municipal Court	600.00
Inspector of Gas	1,200.00
Assistant Gas Inspector	900.00
Light Inspector	900.00

CITY HALL.

Janitor, pays all help	$2,100.00
Elevator Attendant	840.00
Engineer	1,080.00
Assistant Engineer	840.00
Firemen, per month	55.00

ENGINEER'S DEPARTMENT.

	Per annum.
City Engineer	$4,300.00
Assistant City Engineer	1,800.00
Street Engineer	1,400.00
Assistant Street Engineer, per month	$90.00
Sewer Engineer	1,650.70
Assistant Sewer Engineer, per month	90.00
Bridge Engineer, per month	100.00
Chief Clerk, per month	110.00
Sidewalk Engineer, per month	90.00
Bookkeeper, per month	90.00
Transitmen, per month, $85 to	105.00
Draughtsmen, per month	75.00
Levelmen, per month, $70 to	80.00
Timekeepers, per day	3.00
Rodmen, per day, $2.25 to	2.50
Cement Inspector, per month	85.00
Assistant Cement Inspector, per day	2.50
Street Foreman, per month	100.00
Inspector (Chief), per month	85.00
Assistant Inspector, per month	70.00
Stenographer, per month	60.00
Clerks, per day, $2.25 to	2.50
Inspectors, per day, $2.50 to	3.25

HEALTH DEPARTMENT.

Commissioner of Health	$2,250.00
Inspector of Meats and Provisions	1,350.00
Inspector of Meats and Provisions, forage per year	60.00
Five Sanitary Inspectors, each	900.00
Five Sanitary Inspectors, each allowed for forage, per year	60.00
Three Medical Inspectors, each	1,000.00
Chemist	1,000.00
Bacteriologist	1,000.00
Bread and Milk Inspector	900.00
Clerk and Registrar of Vital Statistics	900.00
Bread and Milk Inspector, forage per year	60.00
Dump-keeper	600.00
Quarantine Hospital Keeper	500.00

FIRE DEPARTMENT.

Chief Engineer	$3,000.00
First Assistant Chief	1,800.00
Second Assistant Chief	1,700.00
District Chief Engineer	1,400.00
Fire Marshal	1,200.00
Superintendent Fire Alarm Telegraph	1,680.00
Assistant Superintendent Fire Alarm Telegraph	1,020.00
Lineman	900.00

Salaries—Continued.

	Per annum
Department Secretary	1,200.00
Assistant Department Secretary	800.00
Veterinary Surgeon	1,380.00
Master Mechanic	1,320.00
Telephone Operators	660.00
Captains, First Grade	1,020.00
Captains, Second Grade	990.00
Lieutenants, First Grade	900.00
Lieutenants, Second Grade	870.00
Engineers, First Grade	984.00
Engineers, Second Grade	960.00
Pipemen, First Grade	870.00
Pipemen, Second Grade	840.00
Pipemen, Third Grade	780.00
Candidates on Probation, and Watchmen	600.00
Assistant Engineers, First Grade	900.00
Assistant Engineers, Second Grade	870.00

POLICE DEPARTMENT.

	Per Annum
Superintendent of Police	$3,000.00
Police Clerk	1,300.00
One Clerk (detailed days), per month	66.67
One Clerk (detailed nights), per month	58.33
Stenographer	600.00
Pawnbroker Inspector	1,200.00
License Inspector	1,200.00
Sidewalk Inspector	1,160.00
Dog License Inspector	900.00
Captains, each	1,200.00
Lieutenants, each	1,100.00
Sergeants, each	1,000.00
Mounted Lieutenant	1,360.00
Mounted Sergeants, each	1,260.00
Regular Detectives, each	1,200.00
Two Sergeants, Municipal Court, each	1,020.00
Four Sergeants, Municipal Court, each	1,000.00
Officers Detailed at Municipal Court, each	900.00
Telephone Operators, each	900.00
Jailers, each	900.00
Drivers, each	900.00
Jailer	900.00
Janitors, First Precinct, each	720.00
Mounted Patrolmen, each	1,160.00
Matron	720.00
Scrub Woman	250.00
Patrolmen, First Year, each	780.00
Patrolmen, Second Year, each	840.00
Patrolmen, Maximum Salary	900.00

WATER WORKS DEPARTMENT.

Registrar	$2,000.00
Cashier	1,150.00
Bookkeeper	840.00
Clerk	900.00
Clerks, per month	65.00
Inspector (including horse) per month	75.00
Inspector (Building Permits), per month	75.00
Inspector (Fire Pipes), per month	75.00
Meterman (Mechanic), per month	75.00
Street Foreman	1,200.00
Assistant Street Foreman	840.00
Storekeeper and Clerk, per month	65.00
Laborers, per day	2.00
Laborers, per day	1.75
Engineer (Bergstrom)	1,320.00
Engineers	1,080.00
Assistant Engineer	840.00
Oilers, per month	60.00
Helpers, per day	1.75
Blacksmith, per month	65.00
Hostler, per day	2.00
Firemen, per month	60.00
Parkman, per month	50.00

Salaries Fixed by Legislature.

	Per annum.
Mayor	$2,000.00
Aldermen	500.00
City Clerk	3,100.00
Municipal Judges, each	3,000.00
Clerk Municipal Court	1,800.00
Deputy Clerks Municipal Court	$1,500 and 1,000.00
Stenographer Municipal Court	1,500.00

CITY ENGINEER'S DEPARTMENT.

MINNEAPOLIS, MINN., Jan. 7th, 1901.

To the Honorable City Council:

GENTLEMEN:—I herewith submit report of work done under my direction for the year 1900. The amount of money set aside for permanent improvements was divided as follows:

For sewers	$38,000
For paving and curb	29,500

In addition to the above there was allowed the department as follows:

For paving, curb and sewer repairs	$25,000
For bridge repairs (including Dupont avenue bridge from Western avenue towards Fourth avenue north	14,000

Sewers.

Recommendations:—

I would respectfully call your attention to the importance of completing sewers ordered during the year 1900, and yet unfinished on account of lack of funds. These sewers are very urgent and were recommended by the Committee on Sewers with a recognition of their necessity and at the same time with a full knowledge of the conditions of the funds available. To build these during the coming season will give the city the use of the money at the time of their completion for 1-5 of the assessed cost. In addition to these is the extension of sewers throughout the Kenwood district for the accommodation of residents who are dependent at the present time upon cesspools, the maintenance of which is very costly and thoroughly unsanitary.

To protect the business district along Plymouth avenue it is very important to extend the sewer on 5th street north from 11th avenue to Plymouth avenue. The 26th avenue north sewer, built during the present season from Washington avenue to 4th street, should be extended the coming season to the river. This sewer is for the accommodation of the Tenth ward, the drainage and sewerage of which are very urgent.

Now that Emerson avenue south between Hennepin avenue and 27th street has been nearly graded, a sewer should be built on this street connecting that portion of the Hennepin avenue sewer east of Emerson avenue (and which has at this time an overflow outlet) direct with the 27th street main sewer.

I would recommend that before the Minnesota Sugar Beet Company makes connections with the Lake street sewer at the city limits, proper plans be submitted to this department for approval, and restrictions be made that will give the city the supervision of the use and maintenance of said sewer.

I would further call your attention to that part of the Eighth and Thirteenth wards lying south of 34th street which has been built up with modern residences and is in great need of sewer facilities. This territory is tributary to the 38th street district, which for its development will require a trunk sewer from the Mississippi river. The city's limited means, the great portion of the route along which there is no demand for sewers, the excessive cost of non-paying property and the great cost of this sewer, make it inadvisable at this time to consider its development. A temporary expedient would be to develop the secondary system, and, by the use of pumps, take care of the sewage until such time as the building of the main sewer would be warranted.

I would also recommend further that the street commissioners of the different wards be urged to keep catch basins, grates and openings clear from obstructions; also to have gutters paved on sand streets, particularly where the grade is steep; and that the police department be instructed to assist in preventing catch basins being used as dumping places for kitchen offal and other refuse.

Bridges.

There was set aside for general bridge repairs for the year 1900 $14,000. Of this $4,748.11 was used for the reconstruction of Dupont avenue bridge from Western avenue to within 100 feet of 4th avenue north. The itemized cost of this work is as follows:

1,148 perch of rubble stone at 85 cents	$975.80
24 perch of heavy stone, at $1.07	25.68
141 perch of footing stone, at $1.85	260.85
65.75 perch of coping stone, at $1.85	121.64
475 bbls. Mankato, Louisville and Utica cement	349.50
326 cubic yards of sand, at 50 cents	163.00
Hardware (nails)	23.00
Lumber	68.67
Rock salt	6.60
Oil	4.03
275 cu. yds. fill, at 22½ cents	61.88
34 cu. yds. fill, at 10 cents	3.40
Labor	2,683.46
	$4,748.11

Plymouth Avenue Bridge over River.

This bridge was re-planked with two-inch pine plank on bottom and two-inch oak on top of roadway and two-inch pine sidewalk, at a total

Cost of	$3,309.55
20,000 feet B. M. oak plank was bought in 1899, at $21.00	420.00
Leaving balance expenditures for 1900	$2,889.55
General repairs previous to replanking	65.88
Watchman's house, coal and tools	5.25
	$2,960.68

This amount was distributed as follows:

102,004 ft. B. M. pine lumber	$1,619.34
32,401 ft. B. M. oak lumber, at $21	680.42
Hardware (nails)	127.75
10 bbls. refined coal tar, at $5.00	50.00
Oil	1.00
Labor	411.04
General repairs	59.78
Castings for posts	7.10
Coal for watchman's house	4.25
	$2,960.68

West Lake Street Bridge over Railroad.

This bridge was replanked with two-inch pine bottom plank and two-inch oak top, at a total cost of $2,747.33, distributed as follows:

66,400 ft. B. M. 2-in. pine plank	$896.57
59,722 ft. B. M. 2-in. oak plank	1,156.72
Hardware—nails, brooms, etc.	103.77
6 bbls. refined coal tar, at $5.00	30.00
5 gallons oil, at 8½ cents	.43
Labor	559.84
	$2,747.33
General repairs	4.50
Fire insurance	105.00
	$2,856.83

East Lake Street Bridge over River.

This bridge was painted and the floor and sidewalk partly repaired. Most of the paint was bought and part of it done in 1899. The itemized cost of this bridge is as follows:

Lumber	$33.97
Linseed oil	18.08
Labor	269.28
One set of blue prints of bridge	15.00
	336.33

Franklin Avenue Bridge over River.

Repairs	$21.18

Washington Avenue Bridge over River.

Guard rails were furnished with 3" x 2" x¼" angle bars to protect them from contact with the street cars and vehicles. The Twin City Rapid Transit Company paid one-half of the expense, or $211.05. Part of the angles were bought in December, 1899. Itemized:

8,889 lbs. 3"x2"x¼" anglebars, at 4 cents	$355.56
Advanced from 1899 budget	99.75
Balance this year	$255.81
120 lbs. ¼"x4" boatspikes, at 4 cents	4.80
Labor	57.75
Miscellaneous expenses to watchman's house	12.95
	$331.31

Tenth Avenue Bridge over River.

Coal for watchman's house	$19.70
Tools for watchman's house	2.65
General repairs	2.62
	$24.92

Steel Arch Bridge over River.

Repairs to watchman's house	$7.26
Repairs to sidewalk	15.72
One shovel for watchman	.50
	$23.48

Twentieth Avenue North Bridge over River.

General Repairs—

Lumber	$25.15
Nails	.18
Labor	22.75
Watchman's house—coal and tools	8.00
	$56.08

Sixth Avenue North Bridge over Bassett's Creek at Dupont Avenue.

Repairs	$9.76

Fourth Avenue North Bridge over Bassett's Creek at Dupont Avenue.

Replanking	$47.98

Sixth Avenue North Bridge over Bassett's Creek at Keegan's Lake.

Replanking	$63.15

Fifth Street North Bridge over Bassett's Creek.

Repairs	$2.15

Tenth Avenue North Bridge over Bassett's Creek.

Labor on railing	$10.50

Lyndale Avenue Bridge over Bassett's Creek.

Repairs	$7.45

Western Avenue Bridge over Bassett's Creek.

Raising floor to conform to paving	$12.35

Dupont Avenue Bridge over Bassett's Creek.

Fencing around dangerous places	$18.65

Cedar Lake Road Bridge over Bassett's Creek.

Widening waterway above bridge	$6.25

Lyndale Avenue Bridge over Minnehaha Creek.

Extensive repairs to approach had to be made on this bridge amounting to $915.04, itemized as follows:

17,069 ft. B. M. pine lumber	$238.12
Oak plank for wedges	2.30
Hardware: wire rope, clips and nails	59.54
Labor (carpenter work)	236.26
Fill	378.82
	$915.04

Nicollet Avenue Bridge over Minnehaha Creek.

Repairs	$23.30

Thirty-fourth Avenue South Bridge over Minnehaha Creek.

Repairs	$17.69

Laurel Avenue Bridge over Railroad.

Fire insurance	$30.00
Repairs	64.96
	$94.96

Lyndale Avenue Bridge over Railroad.

120 ft. iron railing (south approach)	$27.10
Repairs to floor joists and railing	38.46
	65.56

Western Avenue Bridge over Railroad.

Repairs to approach	$9.93

Washington Avenue Bridge over Great Northern Railway.

Building retaining wall, north approach	$7.50
305 loads of fill at north approach	48.76
	$56.26

Second Street North Bridge over Great Northern Railway.

This bridge was replanked with 3" pine bottom plank and 2" oak top.

Pine plank	$216.91
Oak plank	181.73
Hardware: nails, etc.	13.25
Two bbls. refined tar, at $4.50	9.00
Labor	115.25
	$536.14

Superior Avenue Bridge over Horseshoe Lake.

Repairs to approaches	$17.25

First Street and Sixth Avenue South Bridge over Canal.

Repairs	$5.44

Cedar Avenue Bridge over Lake Amelia.

Repairs to floor as follows:

3,832 feet B. M. pine plank	$55.02
One keg of nails	2.80
Labor	23.00
	$80.82

Lyndale Avenue Bridge over Shingle Creek.

Repairs	$3.50

Osseo Road Bridge over Shingle Creek.

Repairs	$3.50

Main Street Bridge over Great Northern Railway.

Cost of replanking same as follows:

10,133 ft. B. M. lumber	$136.02
Hardware: nails, etc.	7.43
1 bbl. refined tar	5.00
Oil	.50
Labor	55.75
	$204.70
Repairs to south approach	52.26
	$256.96

Second Street and Second Avenue N. E. Bridge over Gt. N. Ry.

Repairs to bridge	$2.52
Repairs to sidewalk, south approach	30.23
	$32.75

University and Second Avenue N. E. Bridge over Gt. N. Ry.

Repairs	$3.51

Fourth Street and Second Avenue N. E. Bridge over Gt. N. Ry.

Repairs	$2.52

Fifth Street and Second Avenue N. E. Bridge over Gt. N. Ry.

Repairs	$8.05

Central Avenue and Ninth Street Bridge over Gt. N. Ry.

Repairs to bridge floor	$30.30
Repairs to approaches (sidewalk)	27.01
	$47.31

Central Avenue and Broadway Bridge over Gt. N. Ry.

Repairs to roadway and sidewalks	$44.63

Broadway and Central Avenue Bridge.

Repairs to roadway and sidewalks	$19.25

University and Twenty-Ninth Avenue N. E. Bridge over Ry.

Fire insurance	$87.50

University Avenue S. E. Bridge over R. R. near Fourteenth Avenue.

The cost of rebuilding sidewalk as follows:

Lumber	$108.65
Labor	29.00
	$137.65

Fifteenth Avenue S. E. Bridge over R. R. at Fourth Street.

Cost of replanking roadway and sidewalk.

16,608 ft. B. M. pine plank	$223.17
Bolts and washers	3.63
Labor	101.94
	$328.74

Hillside Cemetery Culvert.

Mason work on stone culvert	$17.20

Church Street Bridge over N. P. Ry.

Building fence to approach	$10.07

Tenth Avenue South Dump.

Cost of raising old dump	$22.01

Bridge Tools and General Repairs.

7,504 ft. B. M. 3 in. x 14 in. Washington fir	$138.85
1 roll detail paper	3.95
2 pairs of hip boots	8.55
5 gallons roof preserve, at 65 cents	3.25
Tools of various descriptions	74.34
Labor on general repairs	368.16
	$597.10
Watering troughs	$27.10

The total amount of money expended this year was $15,030.96, itemized as follows:

New bridge on Dupont avenue over Bassett's Creek	$4,748.11
Bridge repairs	10,233.74
Watering troughs	27.10
Tenth avenue south dump	22.01
	$15,008.95
Out of this was paid by the Twin City Rapid Transit Company on account of Washington avenue south bridge, as hereinbefore described	$211.05
Leaving balance expended by the city	$14,797.90

I wish to call the attention of your Honorable Body to the condition of the Dupont avenue bridge over Bassett's creek. Four years ago this bridge was closed to public travel and has since decayed so rapidly that it can hardly sustain its own weight. The planking on the sides holding the dirt back is liable to give way at any time and obstruct the creek. I would therefore urge your Honorable Body to make the necessary appropriation to finish the balance of this structure from 4th avenue north to 6th avenue north, a distance of about 828 feet, as soon as possible. The amount necessary will be about $22,000.

The bridge department should be credited with the following:

Old lumber sold (turned over to city treasurer)	$207.75
Old sidewalk tiles (turned over to city treasurer)	10.00
From Twin City Rapid Transit Company, on account of Washington avenue south bridge	211.05
Total	$420.80

Bridges repaired by the railroad companies are as follows: 4th street bridge over Great Northern Railway, new sidewalk. 5th street bridge over Minneapolis and St. Louis Railway, new roadway.

Waterworks.

In addition to laying 42,219.2 feet of watermain and 871.5 feet of hydrant connections at a cost of $65,499.35, substantial progress has been made toward the development of a new pumping station. As $50,000 was set aside by your Honorable Body for this purpose and a site on the northeasterly side of the Mississippi river, extending from 37th avenue northeast to the Anoka line, was selected. Preliminary to this, at my request, your Honorable Body directed that a topographical survey be made between 37th avenue northeast and a point one-half mile above Rice creek. This survey was made to bring out the topographical features and to determine the feasibility of sedimentation basins which will be supplied by a gravity system leading from a contemplated dam to be located above Rice creek.

This survey having been completed, at my solicitation, the Water Works Committee employed the services of Mr. J. T. Fanning, consulting engineer, and Mr. Wm. de la Barre, engineer Minneapolis Mill Company, both gentlemen being eminent hydraulists, to outline a report of what they believe to be the best method to be adopted toward the development of the water works system. This report is of such importance that I deem it proper to submit it in full.

The Honorable Committee on Water Works of the City Council of Minneapolis:

Gentlemen:—In compliance with your request that we report in reference to locating a new pumping station for the city's water supply, having in view the probable future clarification of the water supply, we have the honor to state that we have duly examined several available sites for new pumping stations, and have considered the probable future requirements of the city in relation to the adequacy and purity of its water supply and beg to report as follows:

The Hydraulic Pumping Stations:—The request of your Honorable Committee seems to have had its origin in the suggestion of removal or abandonment of the lower two of the city's three pumping stations.

These two pumping stations are in the heart of the city and are downstream from the outlets of several of the city's small sewers and at a point in the Mississippi river that is subject to defilement by the surface drainage of a considerable area of the city. The series of sanitary examinations that have been made of the water supplies of these two lower stations during several years past have shown almost uniformly that their waters are not suitable for the city's supply of potable water, because of sewage contamination. For this reason the third, or North Side pumping station, has of late been chiefly depended upon for the public water supply except when accident has made necessary the use of the lower stations.

In considering the methods of increasing the city's pumping capacity it appeared that there were reasons other than sanitary objections why the increased water supply might not readily be obtained at the lower stations, as, for instance, at both stations the area of land owned by the city is now entirely covered by the pump houses; the city does not own water power sufficient to drive more pumps than are now located in the stations; the force main from the station on Hennepin Island to the east shore of the river is in a tunnel in soft sand rock and passes over several tail races and is liable to destruction by a washout at any time; the pumping station on the west shore is in the midst of high mill buildings and is liable to complete destruction by falling walls of the mills at any time should one or more of the mills be destroyed by fire.

It is recognized that these two lower stations are very valuable as auxiliaries of the water supply for the fire protection of the city, but unfortunately when so used the water mains are then filled with contaminated water and the better water supply from the North Side station thus deteriorated.

These are mentioned as a few of the reasons why it is not advisable to increase the pumping capacity, that grows in requirements from year to year, by increasing the machinery of the down-stream stations which are located in the heart of the city.

The abandonment of these lower stations without first providing an equivalent water supply elsewhere might seriously endanger the safety of the city.

The Old Hydraulic Pumps:—If a new pumping station is provided the best of the pumping machinery which is now driven by water power in the lower stations might be removed one pump at a time and set up in the new station and there adapted to be driven by steam or electric power and thus the abandonment of the lower stations be brought about with slight hazards to the fire protection of the city. Such removal of the old hydraulic pumping machinery should, however, be contingent upon the showing, after careful examination and estimate, that it would prove true economy for the city to order the removal of the old pumps to the new station and adjustment to the new conditions.

Capacities of the Several Stations:—In the examination of the pumping capacities of the several pumping stations we find that the West Side lower station (No. 1), has six pumps of continuous working capacity of about twenty-four million gallons daily, though sometimes stated as thirty-three million gallons. The East Side station (No. 2) has one pump of continuous working capacity of about seven million gallons daily, though sometimes stated of ten million gallons. The combined continuous working capacity of the two lower stations is therefore about thirty-one million gallons and the working capacity of the upper, or North Side station (No. 3), is about twenty-four million gallons daily.

The lower two pumping stations, which are hydraulic, have therefore about 56 per cent of the continuous pumping capacity and about 60 per cent of the fire protection capacity of all the pumping plants.

During the year 1899 the upper or steam station pumped 5,275 billion gallons and the lower, or hydraulic stations, pumped 1,610 billion gallons of the annual water supply. The upper station therefore supplied 76.6 per cent and the lower two stations supplied 23.4 per cent of the annual water supply.

The Daily Consumption of Water:—The total daily average pumping in all the stations, as grouped into monthly statement for the last year, is as follows:

Daily Average Pumping in 1899.

MONTH.	Daily Average Gallons.	Per Capita Gallons.
January	19,384.487	96.9
February	21,193,103	105.9
March	20,385,665	101.0
April	19,023,700	95.1
May	17,951,712	89.8
June	18,421,561	92.1
July	23,760,915	118.8
August	22,012,374	110.0
September	18,256,442	91.2
October	17,349,261	86.7
November	14,913,174	74.5
December	13.766,561	68.8
	18,862,448	94.3

The daily consumption of water as averaged for the month of July was 23.75 million gallons and at certain hours during the month probably exceeded a rate of 30 million gallons daily, exclusive of the fire protection draught.

Reinstallation of the Old Pumps:—In the North Side station there remains floor space where two additional pumps can be placed. In the West Side lower station there are but two if any of the five pumps that are worth removal and in the East Side station there is one pump similar to the best two above mentioned. These three pumps are each of five cylinder construction and each has five piston rods and single acting pistons connected to one crank pin. The pump cylinders are all placed horizontally and the driving shaft of each pump stands vertically. If these pumps are removed to the North Side station to be driven by electrical power instead of water power they should be provided with bevel gears for connections to the motors and should have in addition to the motor connection, steam engine connections so that in case of accident to the electrical supply the steam power would be available, and at any time the more economical of the two powers might be used.

Cost of Pumping:—The cost of fuel alone for each million gallons pumped by steam power at the North Side station during the year 1899 averaged $3.75 *for each million gallons pumped.* We are not aware that any propositions are in the hands of your committee for electrical power that we can compare with the above cost of fuel. The cost of attendance, lubricants and incidentals, other than maintenance and repairs of plant, would be slightly less at the North Side station for electrical than for steam power. The reservoir surface to which the water is pumped is 214 feet higher than the floor of the pump house and the pumps usually work against 95 pounds per square inch pressure.

Condition of the North Side Station:—Apparently the selection of the site of the North Side station was unfortunate and was not wisely considered. This fact must be kept in view in considering the increase or substitution of pumping machinery. The sub-soil at the North Side station is in part of quicksand and hence the pump house foundations, resting on this unstable base, have settled so as to produce cracks in the foundations and walls.

The station is placed in such low position near the river shore that flood waters have several times surrounded the building. The station is also located at a point subject to high back water by log and by ice jams, and is in some danger of wreckage by a flood if a jam should deflect a strong current in the direction of the pumping station. It is probable that the floor of the station was placed so low to permit of the use of horizontal pumps such as are now used in the station.

In case of the removal and reinstallation, in the North Side station, of any of the pumps now in the lower stations they would necessarily be placed at the same level as the pumps now in the North Side station, because the old pumps are of the horizontal class and there is a limit of the height at which they can be placed above the surface of low water in the river and have their suctions operate efficiently. They would therefore be subject to flooding to the same extent as are the present North Side pumps. Fortunately the river has not been in extreme high flood since the North Side station was built.

While it is true that some of the old pumps may be advantageously installed in the North Side station for temporary use to assist in maintaining an adequate supply of water for the daily consumption during the time when the North Side pumps cannot fulfill the daily requirements and to maintain an adequate fire protection, yet there will still be risks in concentrating all the city's pumps in the same building. The extent of such risk was emphasized during this last summer when the chimney stack at the North Side station was struck by lightning and the entire plant just escaped complete disablement. The explosion of any one of the boilers, which are closely grouped, might possibly disable the entire station.

A New Pumping Station:—An additional pump house might be constructed adjacent to the present North Side pump house except for the objectionable sub-soil. There are several available sites for pump houses on the opposite or easterly shore of the river which are nearer the city's reservoir and near the present force and supply mains. At any of these sites for pump houses vertical rather than horizontal pumping engines would be advisably adopted.

Borings have been made at each of these several sites to obtain a knowledge of the nature of the sub-soils. The results are shown on the map submitted herewith. Clay is found under nearly all of the sites but not rock. At some of the sites the clay is overlaid with sand and gravel.

Clarification of the Water Supply:—A proper comparison of the advantages of the several sites for locating pumps involves the consideration of the proper clarification of the city's water supply at some time in the near future, and your Honorable Committee has requested us to have this in view. It involves also the question whether or not the river water shall have a preliminary sedimentation before filtration is attempted.

If sedimentation, as a preliminary to clarification, is found advisable then the new pumping station should be located so as to conveniently receive its water from a sedimentation basin. In all pumping stations located on the Mississippi river below Minneapolis, and located on the Ohio river, a preliminary process of sedimentation has been found advisable and in some cases absolutely necessary for the economical and satisfactory clarification of the water supply.

The water supply of Minneapolis is now pumped direct from the Mississippi river to the two reservoir basins recently constructed. These reservoir basins have each a storage capacity of about 48 million gallons of water and they are valuable adjuncts of the city's water supply system.

The water pumped at the North Side station is probably not at present much contaminated by sewage from up the river unless occasionally by the flow from Rice creek, which emptys into the river about four miles above the North Side station. During the open season the river is a log driving stream carrying millions of feet of logs daily to the saw mills of Minneapolis, which ranks as one of the leading lumber markets of the United States. The abrasions of the logs, as they run over the rapids, give to the stream an abundance of bark and woody fibre, while the higher stages of the tributary streams give to the river great quantities of leaves, grasses, water plants and decomposing vegetable fibres and give vegetable solutions from the swamps which color the water a dingy brown. The river in flood stages carries much fine and some coarse sand and small shells. Sometimes, when the river volume is greater than the ordinary flow, the vegetable debris is found troublesome at the racks in front of the turbines at the mills and sometimes, at flood stages. men to clear the racks stand nearly touching elbows working hard to keep the rack sufficiently open so that the turbines may have a full supply of water. Such trouble with vegetable debris carried by the river may continue several successive weeks at a time. The attempts to fully clarify the water on such occasions, without previous removal of nearly all the coarse debris and much of the very fine sand in suspension in the water, would prove not only difficult but impossible in a filter plant of such dimensions as this city can afford to buy.

At present the city's reservoir and distribution mains are the sedimentation basins clarifying, to a considerable extent, the city's water supply. The sedimentation in the pipes is made unpleasantly evident whenever the direction of the current is reversed. The cleaning of one of the reservoirs of its sedimentary deposit has just been completed. While this reservoir was being cleaned recently we gathered a dozen samples of the deposit from the floor of the basin, some from near the inflow pipe and other at increasing distances from the inflow. These samples of deposit in the reservoir are presented herewith. The preliminary removal of such sediments as are here shown will make possible satisfactory filtration of the water at all seasons.

On the other hand there are times of several weeks duration when a coarse rack in the stream can only with much labor be prevented from clogging when the leaves, grasses and barks are flowing abundantly. For instance, today there is moderate rise in the river and seven men are busy all the twenty-four hours keeping clear the racks of the lower electric station near Tenth avenue bridge.

System of Clarification:—The two reservoir basins, which the city has already built, were a part of the project of a complete water supply which included filtration of the water. These two reservoir basins, according to the city engineer's report of the year 1896, cost about $432,000. The filter plant which it was proposed to construct in connection with this reservoir, was estimated to cost $250,000. The plan, as suggested in the report, was to pump water direct from the river to the filter plant, pass it through the filter and from thence to deliver it to the inlet basin of the reservoirs. The project proposed the construction of four reservoir basins, two of which are completed. It also proposed the new pipe lines which have been completed to the reservoir. It also proposed additional pumps. The total cost was estimated to be $1,150,000.

Another project of filtration might include the construction of two additional basins, as before proposed, making four complete basins of about 48 million gallons storage capacity each and then to use three of these basins for sedimentation. The water would then be pumped from them through a filter located adjacent to the basins and into the fourth which would be used as a clear water basin. From this clear water basin the water would flow to the city as it does at present from both of the basins already constructed.

Another system of clarification may include the construction of a settling basin adjacent to the river shore which would be the equivalent of the three reservoir basins above referred to. These settling basins, by the river, would then be connected with the pumping station and a filter plant constructed adjacent thereto.

According to this plan, the water pumped from the sedimentation basin would be, in large part, clarified before reaching the pumps and properly prepared to pass upon the filters and in such condition that the filters could give the water most thorough clarification. This sedimentation basin would be a substitute for the two additional reservoirs proposed in the original plan and its cost of construction would probably be not greater than the cost of the two reservoir basins already completed.

The first two projects of filtration as referred to contemplate the pumping of the river water in its natural state with its sediments to the present reservoir site. The sand carried by the river has proved very destructive to the pumps, causing them frequently to leak about the plungers, thus reducing their capacity and causing frequent repairs. This last proposition, including the sedimentation basins, proposes the removal of the sand and nearly all the impurities before the water reaches the pumps.

Recognizing fully the advantages of this last method of clarification, search has been made for a proper location of settling basins. Such a location, admirably adapted for the purpose, was found on the easterly side of the river and not far distant from the pipe lines now extending from the north side pumping station to the reservoir. A map of the location showing its topography and altitude is submitted herewith.

The site is of sufficient area to contain a sedimentation basin constructed in two sections and of total storage capacity of about 150 million gallons of water. This location is about one-half mile up the stream from the North Side pumping station and on the opposite side of the river, the same side on which the reservoirs are now located.

The sediments carried by the Mississippi river are very largely vegetable matters, in one form or another, with relatively slight contamination from sewage or other matters that might be deleterious in a potable water supply. The river flows over rapids at frequent intervals in its passage from all the towns located above this city, a condition which is favorable for oxidation of any sewage contamination on coming from those towns.

Ordinarily the river water would be a good potable water when clarified of sand and vegetable matter such as is shown in the samples herewith handed you from the sediments deposited in the reservoir It would thus be clarified by passing it through a sedimentation basin of proper capacity. During much of the year it would then be in condition to be pumped directly into the distributing mains. As the towns up the river increase in size their sewage will be more objectionable and filtration will then become necessary. If such a sedimentation basin is constructed, and the pumping station located adjacent thereto, as is desirable, then the filter would probably be placed adjacent to this pumping station. The water might then be pumped through the filter to the reservoir, as at present, or might be pumped directly into the mains as occasion would require, or might be pumped into the mains and the surplus not consumed at hours of lowest consumption would then flow into the reservoir to be drawn from during those hours of the day when the consumption of the water was at its maximum. This would constitute a flexible pumping system well adapted to the needs of this city and would have in combination all the advantages of a reservoir and a direct pumping system with the most perfect clarification.

New Pumps:—Minneapolis is a thriving and growing city with constant increase of population and constant increase of consumption of water. During the decade 1879 to 1889 the increase in water consumption was about 400 per cent, while the increase in population was about 250 per cent. During the decade 1889 to 1899 the increase in water consumption was about 46 per cent, while the increase in population was about 23 per cent.

If we compute the increase in consumption during the present decade at only 50 per cent then the average at the end of the decade, in midsummer, will be 28¼ million gallons of water daily and at the maximum hours of consumption at the rate of 45 million gallons daily. It is evident that if the lower two stations are abandoned, as should be the case, then new pumps of at least 25 million gallons daily capacity must be installed within the present decade. The increase in the city's water consumption is now so rapid and its magnitude so great that a comprehensive plan of the water supply and its growth should now be adopted to replace the present system, which is weak at so many points and which does not give properly clarified water.

Approximate Estimates:—Since the request of your Honorable Committee called for only a general report on the matter of abandonment of the lower pumping stations, the selection of a new station and a proper system for the clarification of the city's water supply, we did not assume that the expense of detailed plans of the projects considered was warranted. Such plans will be required on which to make precise estimates of quantities and prices in the constructions.

The consideration of the removal of some of the old pumps from the lower to the North Side station or to a new pump house related only to their use as a temporary expedient to serve while new pumps are being installed. The cost of removal of each pump of seven million gallons capacity daily, including foundations, gears and an electric motor to drive the same, would be about $7,000, exclusive of cost of repairs or renewal of parts of the pumps which have been in operation since 1883, and, if new steam engines and boilers were added, the whole cost would be about $17,000 for each pump.

New, first class, economical steam pumping engines of the vertical type would cost $35,000 to $40,000 if of the same seven million gallons capacity. The cost of two new basins adjoining the present reservoir for sedimentation basins would be approximately $350,000. The cost of two new sedimentation basins near the river would be approximately $430,000, beside cost of land.

If the water receives proper sedimentation before it goes to the filters the required capacity and cost of filters, for equally efficient work at all times, will be reduced one-half. If the water is properly sedimented before it is pumped, filtration will not be so much a necessity for several years to come and pump injuries on account of grit will be reduced one-half. Sedimentation is not expected to remove all the bacteria but, when properly conducted, will remove a considerable part of them from the water.

It is now generally believed that a majority of the classes of bacteria found in flowing streams above cities and above sewage contamination are scavengers and purifiers of the water. We judge that the parasitic or disease inducing bacteria form a very small proportion of the whole number of bacteria found in the waters of the Mississippi river above Minneapolis.

It might be found desirable to introduce a tiny spray of some harmless precipitant, such as an alum solution, behind the rack at the entrance to the sedimentation basins. The effects of this would be to gather such fine organic matters as were in the water into floculent masses and to materially hasten their deposition. The bacteria would then be in large part entangled with the other suspended vegetable matters and carried to the floor of the basin and thus be prevented from reaching the water mains.

There have been some objections to taking the river water for a public water supply from any point below Rice creek, which is about four miles up stream from the site of the sedimentation basin shown on our map, and such objections are well founded if the Rice creek waters are not protected from the sewage of a large industrial plant on its water shed. It can readily be so protected.

A new dam is proposed across the Mississippi river immediately above Rice creek for power purposes. If such dam is built a conduit can be constructed from it to the settling basins proposed and the river water will flow through the conduit by gravity to the settling basins, but until then would be lifted into the basins from an inlet adjacent to the basins by a low-lift pump placed in the new pumping station.

Recommendations:—In recapitulation, we repeat that we have found that the city's water consumption is increasing rapidly, that the two down town pumping stations are not readily adapted to enlargement to meet the increasing demands of the water supply, that the waters which they pump are unfit to be introduced into the mains for a domestic water supply. Therefore, the use of the two lower stations ought not to be continued as a part of the city's water supply system.

We have found also that there are three, among the several pumps in the down town pumping stations, that might be removed to another station and reinstalled for temporary purposes to maintain the fire protection of the city, though probably not with good economical results.

We have found also that a proper clarification process of our water supply from the Mississippi river should include a preliminary sedimentation and that such proper sedimentation would be at most seasons of the year an efficient clarification.

We have found also that such sedimentation would reduce injuries to the pumping machinery from the cutting action of the sands as heretofore experienced and the frequency of repairs to the pumps would be less.

We have found that the water consumption of the city is now so great and is increasing so rapidly with the growth of the city that a comprehensive system of water supply ought now to be adopted and so planned that it may expand as the water supply demands increase.

We have found a favorable site for such a sedimentation basin as is needed, fronting easterly on Marshall street, its nearest corner being only about 1,400 feet, by Marshall street, from the present force main to the reservoir.

We have found that, on the street front of said basin site there is an excellent location for a pumping station, boiler houses and a filter plant, and that the present distribution mains of the city may be readily connected with said pumping station by a short line along Marshall street, and that said pumping station site may be connected with two railways for receipt of fuel supplies by only about 500 feet of switch track.

We find that the construction cost of two sedimentation basins of about 150 million gallons capacity would probably not much exceed the cost of completing the two additional reservoirs heretofore proposed, of 96 million gallons capacity, and would be a substitute for them, as with proper clarification the present two reservoir basins will serve amply for clear water basins.

We therefore recommend that your Honorable Committee secure the land shown on the accompanying map and marked for sedimentation basins and that your new pumping station be located on said land.

Respectfully submitted,

J. T. FANNING.
WM. DE LA BARRE.

Minneapolis, October 9, 1900.

Frost Jackets.

After corresponding with a number of northern cities, both in the United States and in Canada, I was convinced that frost jackets could be substituted for the old wooden box packed with shavings. Accordingly I recommended to the Water Works Committee that they adopt the frost jackets, which recommendation they acted upon and there were put in place during last year forty-five of these frost jackets, all of which have given very good satisfaction.

I wish to call the attention of your Honorable Body and of the Committee on water Works to the importance of the development of the distribution service, as shown by the accompanying table, which should be taken up progressively and prosecuted from year to year.

I further wish to call your attention to the tables showing the comparative cost per million gallons for repairs on the different pumps for the past twelve years, and further, to another new table giving for each tenth in depth the number of gallons of water in the reservoir. This will be a valuable working table.

It is hoped that during the coming year substantial progress will be made on the new pumping station.

By direction of the Water Works Committee preliminary estimates and plans have been made for this; also designs for Jumbo pumps to be run on single shaft either by steam or electricity.

Stand Pipe.

For the Lowry Hill district the water supply of which is insufficient during the day, particularly in summer, I have advised the erection of a stand pipe of 200,000 gallons and placing of check valves on necessary mains to isolate the district. This method would insure stable pressure and even and necessary supply.

The following routes are recommended to be laid in the following years for the purpose of abolishing dead ends, and complete circulation and supply.

To avoid dead ends—

1901

Street.	From.	To.	Size in Inches.
2nd avenue S	18th street	19th street	6
16th avenue S. E	6th street	7th street	6
3rd street N	20th avenue	23rd avenue	6
19th avenue S	8th street	Minnehaha avenue	6
Adams street N. E	17th avenue	18th avenue	6
Jefferson street N. E	18th avenue	25th avenue	8
Oak street	Como avenue	Division street	16
Elwood avenue N	Irving avenue	James avenue	6
Plymouth avenue	Irving avenue	Morgan avenue	16
Logan avenue	6th avenue N	8th avenue N	6
Queen avenue	5th avenue N	6th avenue N	6

For circulation and supply—

1901

Central avenue	25th avenue N. E	37th avenue N. E	30
4th street N. E	18th avenue	25th avenue	16
13th avenue N. E	Main street	Washington street	16
2nd street S	11th avenue	12th avenue	16
12th avenue S	2nd street	6th street	16

To avoid dead ends—

1902

15th avenue S	23rd street	24th street	6
22nd avenue N. E	5th street	6th street	16
5th street N. E	20th avenue	22nd avenue	6
Fulton street S. E	Oak street	Huron street	12
Dartmouth street	Fulton street	Lennox street	12
Lennox street	Dartmouth street	Yale street	12
Yale street	Lennox street	Seymour avenue	12
Seymour avenue	Yale street	Orlin avenue	16
Knox avenue N	Present terminus	Plymouth avenue	6

For circulation and supply—

1902

Marshall street N. E	25th avenue	30th avenue	16
16th avenue S	4th street	8th street	16
20th avenue N	Washington avenue	3rd street	16
5th avenue N	Lyndale avenue	Knox avenue	12
Humboldt avenue	6th avenue N	Plymouth avenue	16
Penn avenue N. from1-2	of 8th to 10th avenue	to 16th avenue N	24
5th avenue N. E	University avenue	Washington street	12
University avenue S. E	3rd avenue	Oak street	16

To avoid dead ends—

1903

Morgan avenue	12th avenue N	Plymouth avenue	6
Oakland avenue	E. 25th street	E. 26th street	6
Humboldt avenue S	25th street	26th street	8
Broadway street	Polk street	Lincoln street	16
Polk street	Summer street	Broadway street	6
Division street	14th avenue S. E	Oak street	12
Bryant avenue N	22nd avenue	23rd avenue	6
James avenue N	25th avenue	26th avenue	8
4th avenue S	26th street	27th street	6
Aldrich avenue S	27th street	29th street	6
University avenue N E	22nd avenue	25th avenue	6
Polk street N. E	19th avenue	20th avenue	6
29th avenue N	Lyndale avenue	Colfax avenue	8
Clinton avenue	E. 28th street	E. Lake street	6

For circulation and supply—

1903

Street.	From.	To.	Size in Inches.
5th street N. E	25th avenue	37th avenue	24
17th avenue S	Franklin avenue	26th street	12
Girard avenue N	15th avenue	19th avenue	16
Girard avenue N	22nd avenue	26th avenue	16
E. 26th street	Across Park avenue	12th avenue S	12
11th avenue S	26th street	29th street	12
26th avenue S	26th street	Minnehaha avenue	16
19th avenue N	James avenue	Morgan avenue	12
19th avenue N	Newton avenue	Penn avenue	12

To avoid dead ends—

1904

Street.	From.	To.	Size in Inches.
Lincoln avenue	Lyndale avenue S	near Aldrich avenue S.	6
Columbus avenue	27th street	28th street	6
Bryant avenue S	28th street	Lake street	6
Colfax avenue S	28th street	Lake street	6
Emerson avenue S	28th street	Lake street	6
Fremont avenue S	29th street	Lake street	6
Fremont avenue	Hennepin avenue	26th street	6
Girard avenue S	28th street	29th street	6
4th avenue S	32nd street	33rd street	6
Garfield avenue	32nd street	33rd street	12
34th street	Cedar avenue	23rd avenue S	12
23rd avenue S	33rd street	34th street	12

For circulation and supply—

1904

Street.	From.	To.	Size in Inches.
26th street	Minnehaha avenue	29th avenue S	12
Franklin avenue	Hennepin avenue	Penn avenue	12
Penn avenue	21st street	Boulevard	12
Lake of the Isles Boul	Penn avenue	Kenwood boulevard	12
18th avenue N	3rd street	Girard avenue	16
33rd street	Nicollet avenue	3rd avenue S	12
33rd street	Portland avenue	Park avenue	12
34th street	Park avenue	Chicago avenue	12
35th street	Chicago avenue	10th avenue S	12
35th street	12th avenue S	Bloomington avenue	12
34th street	Bloomington avenue	Cedar avenue	12
33rd street	Pleasant avenue	Dupont avenue	12
Dupont avenue S	33rd street	36th street	12
Dupont avenue S	38th street	43rd street	16
38th street	Nicollet avenue	1st avenue S	16
38th street	3rd avenue S	5th avenue S	16
38th street	Portland aveune	Chicago avenue	16
38th street	Nicollet avenue	Dupont avenue	16

Paving and Curb and Gutter.

For the first time in the history of the city of Minneapolis, all the paving curb and gutter was done by day labor, and taking into consideration that it was necessary for the city to start in from the very foundation, i. e. procure the necessary tools and find skilled labor needed for the construction of a large portion of this class of work, I think that the outcome of the experiment was very satisfactory.

I wish to call your attention to Tenth street which was paved with asphalt. Your Honorable Body instructed me to buy the material in the open market, but having no plant I drew up specifications for the asphalt and binder to be delivered on the street. I sent these to several different companies for bids, but all the companies declined to bid except the Barber Asphalt Company, with whom, through their western superintendent, Mr. J. B. Robbins, I was enabled to make the necessary arrangements to comply with your directions. He furnished the material on the street, and I hired his men and tools, paying them for eight hours the regular wages the company paid for ten hours, and allowing ten per cent for the use of the tools and machinery.

I have every reason to believe that the residents of Tenth street will be highly satisfied with the pavement. The gutters along this street, as well as those along streets where cedar block paving was laid, were four and one-half feet in width, Purington paving blocks being used. I think that four and one-half feet is the least width permissible.

In regard to the repairs of asphalt I would say that all the streets which were paved with asphalt and guaranteed by the Barber Asphalt Company have been thoroughly repaired and put in first class condition by the company. The streets paved with asphalt and guaranteed by E. M. Ayers were not repaired the latter part of the season and consequently some of them are in very poor condition and will need extensive repairs early in the season.

The following table will show the amount of voluntary repairs made by the various companies during the season of 1900.

Company—	Sq. Yds. Laid.	Sq. Yds. Repaired.	Per Cent.
American Asphalt Co.	[illegible]	[illegible]	[illegible]
E. M. Ayers	[illegible]	[illegible]	[illegible]
Ayers Asphalt Co.	[illegible]	[illegible]	[illegible]
Barber Asphalt Co.	[illegible]	[illegible]	[illegible]

I would call your attention to the motion of Alderman Leighton, which was adopted by your Honorable Body, directing that Washington avenue north from 3d to 5th avenues and 14th to 22nd avenues; also 20th avenue north from the river to Lyndale avenue be paved with brick during the coming year. I would recommend a speedy completion of Washington avenue north between 32nd and 42nd avenues with macadam, which was ordered and a part of which has been done. The heavy business men along this portion of the street are willing to contribute toward street intersections. C. A. Smith & Company have already donated $500.

If all streets were paved for which there is immediate demand the city's portion would amount to $85,000. Among the most important streets that should be considered, including the above, are as follows:

Street.	From.	To.	Size in Inches.
3rd avenue S.	5th street	Grant street	
4th avenue S.	Washington avenue	3rd street	
10th avenue S.	Washington avenue	3rd street	
1st avenue N.	5th street	7th street	
3rd avenue N.	6th street	7th street	
6th street N.	Hennepin avenue	3rd avenue N.	
2nd avenue N.	5th street	7th street	
University avenue S. E.	5th avenue	Railway bridge	
High street	Bridge square	1st avenue S.	
Main street N. E.	Central avenue	4th avenue	
Main street S. E.	3rd avenue	6th avenue	
Washington avenue S.	12th avenue	Cedar avenue	
Lock up Alley Blk 35	Town of Mpls from 2nd st	to Washington avenue	

Tenth street from 1st avenue south to Chicago avenue should be paved with asphalt. This is the wish of the property owners abutting and would give a continuous asphalt street from Park avenue and 28th street to center of city by Hennepin avenue. It will be necessary to consider conditions of curb on streets to be paved.

In connection with the assessment for granite and sandstone curb, I wish to call attention to the fact that the curbing that was allowed to the Soo Line Terminal Company in the ordinance vacating the avenues between Washington avenue and 2nd street north and between 5th and 10th avenues was given to the city by Mr. Thomas Lowry at the request of Mr. E. C. Chatfield, alderman Second ward.

This curb, 800 feet of sandstone and 1,000 feet of granite, was set in other places where curb was ordered and an average price charged the property holders for the cost so that persons having curb placed in front of their property have the direct benefit of this gift in the reduced cost.

By reference to tables of cost of paving laid and my estimates reported to your Honorable Body at the opening of the season you will find that generally the actual cost was within estimates submitted.

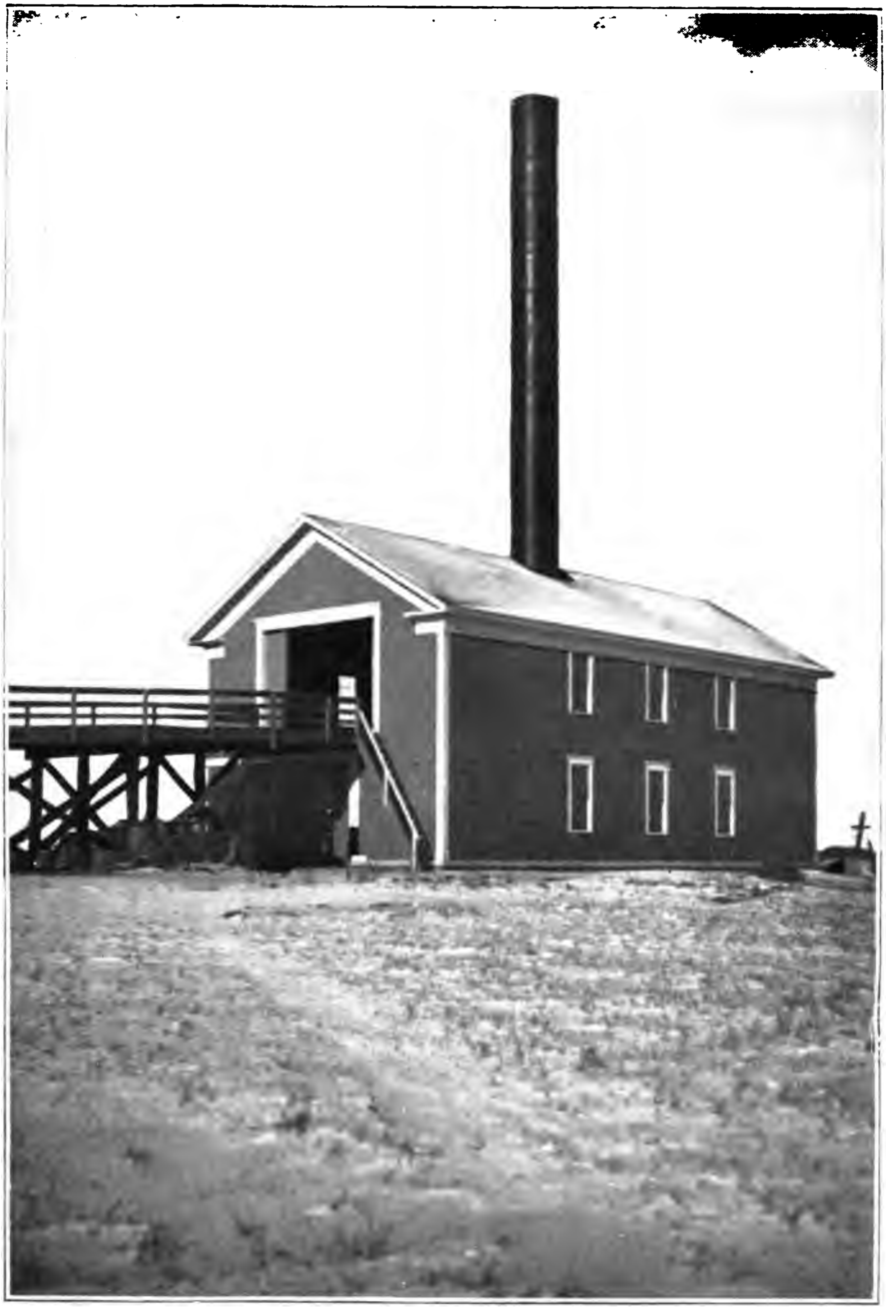

PLATE No. 2

NEW GARBAGE CREMATORY, ALDRICH AND 49TH AVENUES NORTH.

Crematory.

At the request of the Committee on Health and Hospital, there was set aside by the Board of Tax Levy last year $21,000 for the construction of a garbage crematory. Your Honorable Body directed a special committee to visit the different cities and recommend a plant suitable for the purpose. After some investigation it was decided to build a crematory according to plans and specifications under patents of F. L. Decarie, Montreal, with the exception of the building which was planned in my office. A site was selected on the workhouse grounds and work for the construction of the building was begun Aug. 24, 1900.

All work was done by day labor except the incinerators, which I bought from Mr. William Bros, he being the lowest bidder.

The plant will be ready for operation about the 1st of March, 1901, and the total cost will be approximately about $16,500.

I would recommend that the crematory, when completed, be given a thorough trial to allay any prejudice that now exists against a central location under the belief that odors and dust will be a serious detriment to health and comfort. If this is overcome the crematory should be located in the center of population, that the cost of cremation may be reduced to a minimum. As now located I can see no way to dispose of the garbage at even a reasonable cost other than by an arrangement with the street railway company.

Cycle Paths.

According to an ordinance passed by your Honorable Body April 13, 1900, work was commenced on the construction of bicycle paths. Previous to this time no paths had been built directly by the city, although there was some work done by the street commissioners along this line which was mostly in the way of repairs.

The first path ordered constructed under this ordinance was on 2nd street north from 20th to 36th avenues, thence on Washington avenue to Camden Place. This class of work being entirely new to this department, crews had to be organized, tools purchased, etc. Work was commenced on this path May 23rd; on the Monroe and 18th avenue northeast path June 2nd, and on Harvard street path June 4th. Work was carried on continuously on these and other streets, and pushed as vigorously as funds would permit, until August 25th, when a suspension of operations was necessary on account of lack of funds. Up to this time the work was done with three crews consisting of twelve to fifteen men, and three or four teams in each crew. Funds being again available, work was resumed on September 15th with one crew, and finally stopped October 20th.

Repair work was done more or less all through the season; much of it by men in the construction crews, the cost entering into the paths being built at the time. Wherever any extensive repairs were made it was done by a crew for that purpose and charged to cycle path repairs.

Nearly all paths built this season were constructed with wooden curbing, placed about six feet toward the street from the gutter line. 2" x 8" pine lumber was used for the curb nailed to 4" x 4" posts 2" x 8" long, set every four feet. Any available material was used for the base of the filling; some being taken from the street outside the curb when the grade was such that it could be used. This material was put in flush with the top of the curb and rolled with a horse roller and covered with from one to two inches of clay, if clay was available, otherwise loam or as heavy a material as could be had was used for a binder. This binder was rolled and covered with from one-half to one inch of gravel and again rolled.

For about one-third of the season's work we used screened gravel, which was bought in the open market at the market price. For the rest of the work the gravel was obtained wherever possible; a little of it being bought in the pit, but most of it taken from vacant lots where permission could be had from the property owners.

For driveway crossings two-inch plank was used, except where the crossings would have to be used a great deal by heavy teams, when three-inch plank was used. The driveway crossings were put in one inch above the curb at the inside edge of the path, and two inches below the curb at the outside edge, it being found that driveway crossings put in level with the curb were eventually higher than the path after it had settled and become worn, making bad wheeling over them.

When work was started it was thought by representatives of the Wheelmen's Association that plank street crossings could be dispensed with, but it was found that in certain localities they were necessary. Those placed this season were either four or five feet wide, built of three-inch plank on 4 x 4 inch stringers. The location of the paths in the gutter necessitates the placing of culverts at nearly every corner. These were generally built of two-inch plank, leaving an opening about 8 x 14 inches, anything much smaller being found too small for practical use.

All paths, with two exceptions, were built at the side of the roadway. The one on University avenue being built in the middle of the street with 4 x4 inch timber, bedded to within an inch of the general grade of the street on each side for a curb and tied together with 2 x 4 inch and 2 x 6 inch cross ties. While this path, between the curbs, was built in the same manner as the others, it has proven unsatisfactory on account of the impossibility of keeping teams off in wet weather. It has been badly cut up a number of times so that it was almost impossible to ride a wheel over it.

On 5th street south between 14th and 15th avenues, it was found impracticable to construct the path on the same line as the balance of it on that street, on account of cooper shops occupying the whole block, as it would interfere with the loading of the barrels. In this case we built a wheel track six feet wide of plank out far enough from the curb line to allow barrel racks to stand inside and be loaded. This path is level with the street so that teams can cross at will, and at the same time it is so located with reference to the roadway that the general travel up and down the street does not come upon it, and it has proven very satisfactory so far.

There has been no effort made to use cinders for surfacing; one path previously built of cinders brought many complaints from riders that it destroyed their tires. This path has been rebuilt this season, using clay and gravel; crossings, driveways, etc., were put in and the path is now in good shape. The use of cinders as a base under the binder has been considered and is recommended where cinders are available; the idea being that the cinders form a drainage way for water when it seeps through the surface of the path, thereby preventing softening and cutting of the paths.

Some question has arisen in regard to the use of clay in this class of work; as a matter of fact, a binder is necessary in most cases. Where the general material of the path is heavy so that it will eventually pack firmly, clay can be dispensed with, but where the material is sand or other very loose earth, a binder is necessary. Very heavy or rich clay is not essential, though it is a question if such clay is not best, as it forms a very hard surface after the stickiness in time wears off.

Some criticisms have been made by the wheelmen and others in regard to the cost of this season's work in comparison with work done previous years by the Wheelmen's Association. Without entering into any controversy with the men who did the work in the past, I will state that such comparison is hardly fair unless all the facts in the case are considered: When they are so considered, this season's work will be found to compare favorably with any done in the past in this city and also with the work in St. Paul. The season was unfavorable for bicycle path construction, the fore part of it being very dry, and the latter part very wet, with extreme heavy rains that washed all roads badly, and especially those just built.

I would respectfully call your attention to the table and map showing cost, number of miles of path built, etc.

Permits, City Orders and Rebates.

There have been issued 3,395 permits and orders for sidewalk construction during the year 1900, an excess over 1899 of 290 and over 1898 of 1,116.

There have been 3,674 engineer's certificates issued and 792 refundments made on account of special assessments annulled and sidewalks built by owner involving in total rebates $114,682.77, subdivided as follows:

Engineer's Certificate for Sprinkling Tax—	
Annulled	$869.97
Sidewalks built by owner	42,050.17
Sidewalks annulled	45,546.33
Sewer, paving and curb annulled	3,983.11
Watermains	3,191.38
Total certificates	$95,640.96
Refundments—	
Street sprinkling annulled	$755.15
Sidewalks built by owner	8,093.06
Sidewalks annulled	7,781.99
Sewer, paving and curb annulled	1,952.75
Watermains annulled	458.86
Total refunded	$19,041.81

The work of this department has increased in about the same proportion as it has all along the line under my supervision.

The total expenditure of all moneys under the Engineer's Department for the year 1898 was	$620,121.08
The cost of administration	29,869.19 or 4.8%
The total expenditure of all moneys under the Engineer's Department for the year 1899 was	$575,478.52
The cost of administration	28,022.76 or 4.85%
The total expenditure of all moneys under the Engineer's Department for the year 1900 was	$763,155.06
The cost of administration	29,512.58 or 3.86%

I wish to call the attention of the aldermen of the different wards to the advisability of substituting stone crossings wherever practicable for wooden. During the past year, at my suggestion, the gutter stone removed from streets that were being repaved, have been utilized for this purpose. The cost of a wooden crossing is $8.23 where the cost of a stone crossing is $24.50. I find that in twenty years stone would be much the cheaper.

I would further recommend the narrowing of streets in the resident portion of the city, thus widening the planting space which is necessary to the life of the sidewalks and the better location of lamp posts, and further reducing the cost of street maintenance in all its various details.

I wish to thank the various committees and your Honorable Body for their courtesies to me and the trust reposed in me.

Respectfully,

G. W. SUBLETTE,
City Engineer.

TABLE NO. 4.

Amount and Cost of Lumber Used Under the Direction of the City Engineer's Department During the Season 1900.

WARDS.	Culverts and Cross-walks. Feet.	Sidewalk Repairs. Feet.	Sidewalk. Feet.	Total Feet.	Cost.
First	18,308	500	....	18,808	$ 263 8
Second	23,701	3,942	....	27,643	387.2
Third	18,704	17,860	....	36,564	502.4
Fourth	27,240	3,480	6,336	37,056	518.6
Fifth	26,200	....	....	26,200	359.2
Sixth	7,280	1,605	....	8,885	122.5
Seventh	3,533	....	....	3,533	49.2
Eighth	32,666	17,333	....	49,999	697.4
Ninth	8,003	2,000	....	10,003	127.1
Tenth	27,220	5,544	92,390	125,154	1,675.2
Eleventh	16,933	11,553	....	28,486	391.0
Twelfth	8,559	3,149	....	11,708	156.3
Thirteenth	8,000	6,427	20,564	35,091	477.4
Totals	226,347	73,393	119,290	419,130	$5,727.
Sewers	....	....	....	157,925	$ 2,194.
Bridge and Bridge Repairs	....	....	....	260,128	3,894.
Oak L'mb'r for Bridge Repairs	....	....	....	102,883	2,083.
Crematory	....	....	....	87,552	1,425.
Artificial Curb and Gutter	....	....	....	10,248	158.
Brick Paving	....	....	....	11,621	161.
Cedar Paving Repairs	....	....	....	2,576	37.
Macadam Paving	....	....	....	3,733	50.
Bicycle Paths	....	....	....	167,946	2,162.
Third Ward Sprinklers	....	....	....	18,446	292.
Street Signs	....	....	....	5,936	107.
Totals	....	....	....	1,248,124	$18,298.

TABLE NO. 5.

Inventory of Permanent Public Improvements, January 1, 1901, Constructed by or in Charge of City Engineer's Department.

	Length in Miles.	Cost.	Total Cost.
Pavement on streets, alleys and bridges	100.26		$2,213,305.55
Curb, curb and gutter	145.33		745,344.26
Sewer and sewer tunnel		$4,481,332.90	
Sewer store house		4,468.00	
			4,485,800.90
Water mains	265.48	$2,851,306.83	
Waterworks plant		737,440.42	
Waterworks plant, reservoir and pipe lines	9.79	825,876.45	
Watering fountains for people and horses		6,795.18	
			4,421,418.88
Bridges—			
Over Mississippi river		$1,118,401.39	
Over Bassett's creek		93,824.79	
Over Graham's creek		652.00	
Over University creek		13,085.00	
Over Shingle creek		4,436.04	
Over Minnehaha creek		27,727.30	
Over Bridal Veil creek		462.00	
Over Webber creek		139.00	
Over mill company's canal		10,005.00	
Over Horseshoe lake		881.16	
Over or under railroads		518,274.33	
			1,787,888.01
Municipal subway			12,495.00
Crematory			9,224.73
Bicycle paths	31.06		30,285.69
Totals			$13,705,763.02

TABLE No. 6.

Expenditures for Public Improvements under the Direction of the City Engineer from January 1st, 1900, to January 1st, 1901.

ENGINEER'S DEPARTMENT—		
Pay rolls	$29,512.58	
Stationery and office supplies	113.04	
Blank books, blanks, maps, plat books and printing	168.43	
Draughtsmen's supplies	9.65	
Instrument and tools (new)	99.96	
Instrument repairs	15.10	
Postage	73.00	
Telephone	64.15	
Telegrams	15.06	
Typewriter's supplies	17.45	
Livery	36.00	
Blue prints	23.56	
Total		$30,147.98
WARDS—		
Sprinkling	$108,378.11	
Sweeping and cleaning paved streets	43,135.25	
Cleaning and repairing unpaved streets	48,671.91	
Culvert and crosswalks	5,558.28	
Grading	36,257.97	
Sidewalks (new)	78,084.10	
Sidewalk repairs	4,644.48	
Total		$324,730.10
PAVING—		
New	$142,202.04	
Repairs	10,935.02	
Total		$153,137.06
Curb and gutter	$21,549.78	
Curb and gutter repairs	6,244.11	
Bridge and bridge repairs	14,981.85	
Removing telephone poles	17.50	
Crematory	9,224.73	
Conduits	1,025.19	
Minneapolis bicycle paths	11,476.59	
Drain Washington avenue North and 38th avenue	791.09	
Grading lot 26th avenue North and Girard	152.42	
Watering troughs	27.10	
Northeast pumping station	470.00	
Rebuilding intakes crib Pumping Station No. 1	487.96	
Total		$66,448.32
SEWERS—		
Construction	$151,048,53	
Old sewers	20,939.07	
Sewer and water house connections	5,582.07	
Total		$177,569.67
MISCELLANEOUS—		
Paid County Auditor for descriptions (P. I. F.)	$29.60	
Paid County Auditor for descriptions (P. I. R. F.)	560.80	
Sewer and water house connections (assessed) (P. I. F).	9,784.25	
Moneys paid to City Treasurer	1,875.31	$12,249.96
Total		$764,283.09

TABLE NO. 7.

Statistics of the City by Wards, January 1, 1901.

WARDS.	Area square miles.	Population, census of 1900.	Population per square mile.	Total miles of streets.	Miles of traveled streets			Miles of Curb.	Miles of Sidewalk.			Miles of Sewers	No. of Sewer Connections.	Miles of Water Mains	No. of Water Connections.	Miles of sprinkled Streets.
					Not Graded	Graded	Paved av. 27 ft. r'dway		Stone	Plank	Total					
First	2.49	13,747	5,521	38.28	3.81	21.50	8.61	10.01	24.60	8.74	33.34	8.44	295	15.43	743	16.21
Second	4.31	11,860	2,752	60.04	10.93	20.53	10.37	16.00	33.69	10.76	44.45	15.58	659	23.24	1,182	20.22
Third	3.41	27,832	8,162	66.91	5.18	37.25	17.21	20.68	35.75	46.73	82.48	20.83	987	36.07	2,566	29.43
Fourth	4.00	25,400	6,350	68.64	5.93	30.48	23.73	33.82	53.39	17.79	71.18	25.56	1,624	30.74	2,513	31.68
Fifth	1.38	23,302	16,886	30.57	....	20.50	19.17	30.52	49.65	5.26	54.91	22.42	1,526	26.61	3,160	28.77
Sixth	.71	14,457	20,362	14.10	....	11.83	5.09	5.15	13.79	7.92	21.71	7.49	344	9.45	1,002	12.03
Seventh	3.72	12,957	3,483	55.43	18.16	21.77	....	1.10	22.17	13.85	36.02	7.69	248	19.32	1,129	20.51
Eighth	4.06	19,141	4,715	66.94	8.92	50.11	1.91	11.21	53.72	28.43	82.15	23.39	1,161	43.29	2,720	47.10
Ninth	6.18	17,233	2,789	87.51	12.15	21.91	9.96	10.84	35.57	12.92	48.49	10.01	264	21.54	1,197	19.61
Tenth	5.88	9,827	1,673	76.85	21.05	17.81	1.14	1.93	2.69	25.67	28.36	2.16	65	13.35	566	9.04
Eleventh	1.01	15,962	15,903	22.12	1.00	18.84	3.07	5.15	22.62	14.86	37.48	9.04	446	12.80	1,037	18.48
Twelfth	7.28	6,655	914	79.50	28.85	22.60	....	....	9.76	9.88	19.64	2.38	26	5.16	192	4.00
Thirteenth	8.86	4,345	491	123.04	39.76	10.05	....	....	1.55	12.24	13.79	.38	8	12.97	318	6.52
Total	53.29	202,718	3,804	789.93	155.74	305.18	100.26	146.41	358.95	215.05	574.00	155.37	7,653	269.97	* 219,25	263.60

WARDS.	Miles of street car track, single line.	Valuation, real and personal, 1900.	Valuation per capita.	Rate of taxation for ward fund, 1900. Mills.	Amount of tax levy for ward fund, 1900.	Amount of sprinkling tax, 1900.	Miles of sidewalk ordered tax, 1900.	Amount of sidewalk tax, 1900.	Street Lighting.				Building Permits.	
									No. of Lights,			Cost.		
									Electric.	Gas.	Gasoline.		No.	Valuation.
First	4.41	$3,617,551	$263.01	2.00	$7,343.68	$6,801.76	8.99	$25,803.25	60	253	103	$8,731.96	173	$349,002
Second	12.04	6,846,999	577.32	.85	5,943.54	7,166.03	3.54	10,630.41	13	743	306	12,071.62	209	402,784
Third	10.83	10,370,291	372.61	1.05	16,685.95	12,075.84	16.39	49,459.66	106	549	208	16,994.69	393	226,969
Fourth	18.76	31,532,497	1,241.44	1.00	31,764.53	15,517.39	6.06	17,942.54	87	977	186	19,967.71	425	1,256,833
Fifth	11.36	20,668,585	886.99	1.20	25,090.59	11,834.34	2.98	9,743.93	42	962	27	15,165.92	236	656,656
Sixth	3.80	2,717,718	187.99	2.00	5,495.77	5,591.59	6.00	23,226.85	53	161	29	6,497.80	143	73,264
Seventh	6.94	2,410,692	186.05	2.00	4,976.51	7,614.79	7.91	22,558.83	70	114	128	8,664.25	193	67,997
Eighth	17.65	9,103,122	475.58	1.35	12,593.67	14,607.28	15.77	45,242.61	92	807	362	19,867.89	356	466,066
Ninth	8.69	3,413,013	198.05	1.50	5,215.52	6,036.79	3.20	9,119.19	85	141	222	10,587.70	296	169,398
Tenth	7.04	3,074,590	312.87	2.50	7,777.64	3,415.34	3.17	6,317.60	65	42	198	7,462.26	177	71,279
Eleventh	4.32	2,542,278	159.27	1.80	4,783.51	7,616.14	5.77	19,854.45	60	176	98	7,888.20	173	75,142
Twelfth	6.97	1,370,205	205.88	2.45	3,395.92	1,815.96	2.38	6,742.91	54	.....	88	5,188.30	116	32,612
Thirteenth	9.14	1,824,513	419.91	2.50	4,637.27	2,370.39	1.91	4,986.71	55	12	68	4,244.45	116	95,772
Total	121.95	$99,492,054	Av.$490.79		$135,704.10	$102,463.64	84.07	$251,628.84	842	4,937	2,023	$143,127.75	3,006	$3,943,774

* This includes 3,600 made prior to 1885 and not separated into wards.

Table No. [illegible]

Summary of all Paving in the City January 1st, [illegible]

Kind	Where Laid	Sq. yds. 1st Ward	Sq. yds. 2d Ward	Sq. yds. 3d Ward	Sq. yds. 4th Ward	Sq. yds. 5th Ward	Sq. yds. 6th Ward	Sq. yds. 7th Ward	Sq. yds. 8th Ward	Sq. yds. 9th Ward	Sq. yds. 10th Ward	Total yards	Cost	Miles
Cedar block	Streets	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Alleys			[illegible]	[illegible]	[illegible]						[illegible]	[illegible]	[illegible]
	Bridges	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Sd. W. & gutters	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Total	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Granite block	Streets	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]					[illegible]	[illegible]	[illegible]
	Alleys				[illegible]	[illegible]						[illegible]	[illegible]	[illegible]
	Bridges			[illegible]								[illegible]	[illegible]	[illegible]
	Sd. W. & gutters	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]					[illegible]	[illegible]	[illegible]
	Total	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]					[illegible]	[illegible]	[illegible]
Sheet asphalt	Streets				[illegible]	[illegible]		[illegible]				[illegible]	[illegible]	[illegible]
	Sd. W. & gutters				[illegible]	[illegible]		[illegible]				[illegible]	[illegible]	[illegible]
	Total				[illegible]	[illegible]		[illegible]				[illegible]	[illegible]	[illegible]
Sandstone	Streets	[illegible]	[illegible]	[illegible]	[illegible]				[illegible]			[illegible]	[illegible]	[illegible]
	Alleys				[illegible]	[illegible]						[illegible]	[illegible]	[illegible]
	Bridges	[illegible]	[illegible]									[illegible]	[illegible]	[illegible]
	Sd. W. & gutters	[illegible]	[illegible]	[illegible]	[illegible]				[illegible]			[illegible]	[illegible]	[illegible]
	Total	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]			[illegible]			[illegible]	[illegible]	[illegible]
Brick	Streets			[illegible]	[illegible]	[illegible]	[illegible]					[illegible]	[illegible]	[illegible]
	Alleys				[illegible]	[illegible]						[illegible]	[illegible]	[illegible]
	Bridges	[illegible]	[illegible]		[illegible]							[illegible]	[illegible]	[illegible]
	Sd. W. & gutters	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]					[illegible]	[illegible]	[illegible]
	Total	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]					[illegible]	[illegible]	[illegible]
Macadam	Streets	[illegible]		[illegible]					[illegible]	[illegible]		[illegible]	[illegible]	[illegible]
	Sd. W. & gutters								[illegible]			[illegible]	[illegible]	[illegible]
	Total	[illegible]		[illegible]					[illegible]	[illegible]		[illegible]	[illegible]	[illegible]
	Grand total	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

TABLE NO. 9.

Paving Done During the Season of 1900 and Assessed in the Taxes for the Year 1900.

All assessable property is assessed for the cost of paving that part of the street on which said property abuts. The cost of **paving all street intersections** and parts along property exempt from special assessments is paid out of the permanent improvement fund, which **is raised by general taxation. The paving** is paid for in five equal annual installments, with interest at 5 per cent. per annum on all deferred payments. All **work done by the city by day labor.**

STREET.	FROM—	TO—	Kind.	Width paved by street railway. Feet.	Width paved by city. Feet.	Width of roadway. Feet.	Rate of assessment per sq. yard.	Contract price or actual cost per square yard.	Length paved. Feet.	Square yards paved by St. railway.	Square yards paved by city.	Cost of paving laid by city.	Amount of assessment.
Alley, Blk. 80, Town of Mpls	4th st ...	Main alley	Brick....		10	10	$1.83	$1.87	162.9	....	181.00	$ 338 80	$ 333.26
Cedar av...	Wash av...	5th st......	Brick....	15	35 28	50 28	1.78	1.87	1,388.8	2,420.00	6,362.00	11,889.53	7,266.66
3rd av. N.	3rd st......	5th st	Sandst ..	.....	50	50	1.86	1.87	762.3	....	4,123.00	7,705.59	6,422.25
3rd st.	5th av. S...	13th av. S.	Brick....	.....	50	50	1.77	1.76	2,671.0	....	17,809.00	31,249.99	24,997.54
10th st	Hen'pin av	Harmon pl	Cedar blk	.....	Irregular.	Irr'gular.	1.53	1.51	333.3	....	1,241.00	1,868.79	1,196.70
10th st	Harmon pl	1st av. S...	Asphalt..	.....	34 40	34 40	2.59	2.57	999.0	....	4,173.00	10,734.74	10,045.97
University av	Central av.	5th av. S.E.	Sandst ..	.....	40	40	1.94	1.92	2,227.5	....	10,872.00	20,904.80	14,629.12
Vine Place	19th st. ..	Fr'nklin av	Cedar blk	.....	34	34	1.50	1.51	476.9	....	1,717.00	2,590.76	2,577.96
Washington av	5th av. N..	14th av. N.	Brick....	15	Irregular.	Irr'gular.	1.82	1.79	3,200.2	5,588.00	17,749.00	31,824.54	25,482.91
Washington av	36th av. N.	38th av. N.	M'cadam	.....	Irregular.	Irr'gular.	0.65	0.47	686.9	....	2,771.00	1,314.31	*21,217.22
Western av	Lyndale av	Irving av..	Brick....	15	27	42	1.78	1.92	3,002.8	5,003.00	9,819.00	18,863.62	13,564.79
Incidentals	....	....	....	.....	....	....	......	....	....	....	....	1,012.06	....
Totals.	....	....	....	.....	....	....	......	....	15,911.6	13,011.00	76,817.00	$140,297.53	$127,734.38

4.099 miles of brick.
0.946 miles of sandstone.
0.187 miles of cedar block.
0.263 miles of asphalt.
0.175 miles of macadam.

5.670 miles of average 27 foot roadway.

***17 blocks assessed—only one block completed.**

TABLE NO. 8.

Summary of all Paving in the City January 1st, 1901.

KIND.	Where Laid.	Sq. Yds. 1st Ward.	Sq. Yds. 2d Ward.	Sq. Yds. 3d Ward.	Sq. Yds. 4th Ward.	Sq. Yds. 5th Ward.	Sq. Yds. 6th Ward.	Sq. Yds. 8th Ward.	Sq. Yds. 9th Ward.	Sq. Yds. 10th Ward.	Sq. Yds. 11th Ward.	Total Sq. Yards.	Cost.	Miles of average 27 foot roadway.
Cedar block.	Streets	69,349	104,933	168,648	130,077	126,702	43,566	10,720	82,260	10,491	42,279	789,025	$726,355.97	49.81
	Alleys			1,255	4,011	1,964						7,230	9,479.30	.46
	Bridges	8,162	4,405	8,151	6,904		1,084	530	5,701	94	1,045	36,076	26,219.60	2.28
	St. Ry. & gutter.	8,134	15,827	29,526	14,849	1,635	11,880	1,155	28,507	4,702	5,255	121,470	109,284.46	7.67
	Total	85,645	125,165	207,580	155,841	130,301	56,530	12,405	116,468	15,287	48,579	953,801	$871,339.33	60.22
Granite bl'ck	Streets	5,152	19,996	16,435	38,242	49,376	7,456					136,657	$329,439.62	8.63
	Alleys				3,952	876						4,828	10,128.20	.30
	Bridges			218								218	533.28	.01
	St. Ry. & gutter.	508	508		5,712	4,783	719					12,230	30,575.00	.78
	Total	5,660	20,504	16,653	47,906	55,035	8,175					153,933	$370,696.10	9.72
Sheet asphalt	Streets				86,780	76,941		17,386				181,107	$466,874.70	11.43
	St. Ry. & gutter.				12,560	10,031		453				23,044	54,377.63	1.45
	Total				99,340	86,972		17,839				204,151	$521,252.33	12.88
Sandstone	Streets	843	15,640	11,415	10,279				2,411			40,588	$75,702.94	2.56
	Alleys				1,250	729						1,979	3,374.09	.12
	Bridges	786	786									1,572	2,670.55	.10
	St. Ry. & gutter.	586	1,396	82	82				810			2,956	5,360.28	.19
	Total	2,215	17,822	11,497	11,611	729			3,221			47,095	$87,107.86	2.97
Brick	Streets			27,063	37,912	25,369	13,450					103,794	$182,435.13	6.56
	Alleys				9,734	4,726						14,460	27,649.58	.91
	Bridges	617	617		3,098							4,332	52,860.30	.27
	St. Ry. & gutter.	225	225	8,260	10,418	550	2,420					22,098	39,443.49	1.39
	Total	842	842	35,323	61,162	30.645	15,870					144,684	$302,388.50	9.13
Macadam	Streets	42,000		1,645					29,333	2,771		75,749	$53,921.43	4.78
	St. Ry. & gutter.								8,800			8,800	$6,600.00	.56
	Total	42,000		1,645					38,133	2,771		84,549	$60,521.43	5.34
	Grand Total.	136,362	164,333	272,698	375,860	303,682	80,575	30,244	157,822	18,058	48,579	1,588,213	$2,213,305.55	100.26

Table No. 9.

Paving Done During the Season of 1900 and Assessed in the Taxes for the Year 1900.

All assessable property is assessed for the cost of paving that part of the street on which said property abuts. The cost of paving all street intersections and parts along property exempt from special assessments is paid out of the permanent improvement fund, which is raised by general taxation. The paving is paid for in five equal annual installments, with interest at 5 per cent. per annum on all deferred payments. All work done by the city by day labor.

Street.	From—	To—	Kind.	Width paved by street railway. Feet.	Width paved by city. Feet.	Width of roadway. Feet.	Rate of assessment per sq. yard.	Contract price or actual cost per square yard.	Length paved. Feet.	Square yards paved by St. railway.	Square yards paved by city.	Cost of paving laid by city.	Amount of assessment.
Alley, Blk. 80, Town of Mpls	4th st ...	Main alley	Brick....	.	10	10	$1.83	$1.87	162.9	....	181.00	$ 338 80	$ 333.26
Cedar av...	Wash av...	5th st......	Brick....	15	35 28	50 28	1.78	1.87	1,388.8	2,420.00	6,362.00	11,889.53	7,266.66
3rd av. N.	3rd st......	5th st	Sandst ..	.....	50	50	1.86	1.87	762.3	....	4,123.00	7,705.59	6,422.25
3rd st..	5th av. S...	13th av. S.	Brick....	.....	50	50	1.77	1.76	2,671.0	....	17,809.00	31,249.99	24,997.54
10th st	Hen'pin av	Harmon pl	Cedar blk	...	Irregular.	Irr'gular.	1.53	1.51	333.3	....	1,241.00	1,868.79	1,196.70
10th st...........	Harmon pl	1st av. S...	Asphalt..	...	34 40	34 40	2.59	2.57	999.0	....	4,173.00	10,734.74	10,045.97
University av...........	Central av.	5th av. S.E.	Sandst ..	....	40	40	1.94	1.92	2,227.5	....	10,872.00	20,904.80	14,629.12
Vine Place...........	19th st. ..	Fr'nklin av	Cedar blk	....	34	34	1.50	1.51	476.9	....	1,717.00	2,590.76	2,577.96
Washington av...........	5th av. N..	14th av. N.	Brick....	15	Irregular.	Irr'gular.	1.82	1.79	3,200.2	5,588.00	17,749.00	31,824.54	25,482.91
Washington av...........	36th av. N.	38th av. N.	M'cadam	...	Irregular.	Irr'gular.	0.65	0.47	686.9	....	2,771.00	1,314.31	*21,217.22
Western av...........	Lyndale av	Irving av..	Brick....	15	27	42	1.78	1.92	3,002.8	5,003.00	9,819.00	18,863.62	13,564.79
Incidentals...........	....	....	....	.....	....	....	......	....	....	....	....	1,012.06	....
Totals.	....	....	....	.....	....	....	......	....	15,911.6	13,011.00	76,817.00	$140,297.53	$127,734.38

4.099 miles of brick.
0.946 miles of sandstone.
0.187 miles of cedar block.
0.263 miles of asphalt.
0.175 miles of macadam.

5.670 miles of average 27 foot roadway.

*17 blocks assessed—only one block completed.

TABLE NO. 10.

Paving Repairs Made During the Season of 1900.

	Total number of orders.	Total yds. of pavement laid.	Total yds. repaired with crushed stone.	Amount paid for blocks.	Amount paid for gravel.	Amount paid for sand.	Amount paid for lumber.	Amount paid for miscellaneous, teams, etc.	Amount paid for labor.	Amount paid for tools.	Amount paid for material.	Amount paid contractors.	Total cost.
Cedar Paving Repairs	385	18,472	3,792		$392.13		$57.75	$689.97	$2,257.70	$78.91	$40.00		$3,516.46
Granite Paving Repairs	123	4,734		$7.50		$119.93		16.33	1,178.73	14.58			1,337.07
Asphalt Paving Repairs	47	1,559							55.98		36.60	$3,302.04	3,394.62
Brick Paving Repairs	16	313			11.90	11.00		24.20	242.18		117.45		406 73
Sandstone Paving Repairs	5	284		29.82		.60		4.15	136.21				170.78
Totals	576	25,362	3,792	$37.32	$404.03	$131.53	$57.75	$734.65	$3,870.80	$93.49	$194.05	$3,302.04	$8,825.66
Total paid for by companies and individuals													5,893.36
Net cost to city for paving repairs													2,932.30
Average cost per sq. yd. for relaying Cedar paving, including aprons													0.190
Average cost per sq. yd. for repairing cedar paving with crushed stone													0.200
Average cost per sq. yd. for repairing granite paving													0.282

TABLE NO. 11.

Table Showing Pavement Removed and Replaced by Other Pavement to January 1st, 1901.

STREET.	FROM—	TO—	ORIGINAL PAVEMENT.				NEW PAVEMENT.			
			When laid.	Kind.	Square yards.	Cost.	When laid.	Kind.	Square yards.	Cost.
Previously tabulated......	....	....	....	....	264,418	$317,218.81	....	....	264,593	$547,686.02
Alley block 80, Town of Minneapolis.	Fourth street..........	Main Alley	Private Job.	Cedar block...	181	155.00	1900	Brick	181	338.80
Cedar avenue............	Washington avenue...	Fifth street......	1888	Cedar block...	8,782	11,162.14	1900	Brick	8,782	11,889.53
Third avenue N...........	Third street...........	Fifth street......	1892	Cedar block...	4,123	4,248.76	1900	Sandstone.	4,123	7,705.59
Third street S............	Fifth avenue S........	Thirteenth av. S.	1886 1888 1891	Cedar block...	17,806	16,354.86	1900	Brick	17,806	31.249.99
Tenth street..............	Hennepin avenue.....	Harmon Place...	1888	Cedar block...	1,241	1,315.46	1900	Cedar blk..	1,241	1,868.79
Tenth street..............	Harmon Place.........	First avenue S...	1888	Cedar block...	4,173	4,506.84	1900	Asphalt....	4,173	10,734.74
University avenue.........	Central avenue.......	Fifth ave. SE....	1887	Cedar block...	10,872	10,328.40	1900	Sandstone.	10,872	20,904.80
Washington avenue.	Fifth avenue N........	14th avenue N...	1889	Cedar block...	23,337	23,103.63	1900	Brick	23,337	31,824.54
Western avenue...........	Lyndale avenue.......	Irving avenue...	1890	Cedar block...	13,822	15,069.76	1900	Brick	13,822	18,863.62
Incidentals.............	....	....	....	....	....	....	....	....	....	1,012.06
Totals	....	....	....	....	348,755	$403,463.66	....	....	348,930	$684,078.48

TABLE NO. 12.

Summary of Table No. 11.

ORIGINAL PAVEMENT.		NEW PAVEMENT.													Total square yards of pavement replaced.
Kind.	Cost.	Cedar Block.		Plank.		Brick.		Granite.		Sandstone.		Asphalt.		Total Cost.	
		Sq. Yds.	Cost.	Sq. Yds.	Cost.	Sq. Yds.	Cost.	Sq. Yds.	Cost.	Sq. Yds.	Cost.	Sq. Yds.	Cost.		
Cedar block.	$397,867.86	8,149	$7,412.61	2,675	$2,755.00	130 135	$228,832.24	2,977	$5,747.27	44,690	$82,168.48	157,851	$697,882.53	$698,836,04	346,477
Granite.	4,181.90	......	564.73	....	....	....	....	....	....	2,084	3,542.80	....	....	4,107.53	2,681
Asphalt	1,413.90	597	....	......	....	175	321.37	419	808.67	....	....	....	....	1,130.04	594
Total....	$403,463.66	8,746	$7,977.34	2,675	$2,755.00	130,310	$229,153.61	3,396	$6,555.94	46,774	$85,711.28	157,851	$697,882.53	$704,073.61	349,752

TABLE NO. 13.

Summary of All Curb and Gutter Set and in Place January 1st, 1901.

KIND.	NUMBER.		LENGTH.		Cost.
	Curb corners.	Catch basin covers.	Miles 1000ths.	Feet.	
Kettle River sandstone			23.485	282,400.65	$279,433.76
Limestone.			26.103	137,825.07	176,971.16
Combined curb and gutter, (artificial)			48.311	255,081.15	194,224.23
Granolithic curb, (artificial)			3.063	16,174.58	11,425.67
Cement curb, (artificial)			0.446	2,356.30	2,308.98
Granite curb			25.434	134,390.65	123,160.97
Catchbasin covers		1,007			
Curb corners	688				
Total curb, curb corners and catchbasin covers set in city	688	1,007	156.842	828,228.40	787,524.77
Limestone curb, covers and corners replaced by granite	81	236	11.029	58,233.10	39,773.22
Limestone curb, covers and corners replaced by sandstone	11	33	.483	2,553.00	2,407.29
Total limestone curb, covers and corners replaced by other curb	92	269	11.512	60,786.10	42,180.51
Total curb, covers and corners in place in city	596	738	145.330	767,442.30	745,344.26

TABLE No. 14.

Curb and Gutter Set During the Year 1900, and Assessed in the Taxes of 1900.

All Curb and Gutter was constructed under the direction of the City Engineer by day labor. The price given for Sandstone and Granite Curb was F. O. B. Cars Minneapolis.

STREET.	FROM—	TO—	KIND.	Depth of stone in inches.	Depth of gutter in inches.	Width of gutter in inches.	Thickness of curb in inches.	Cost price per lineal foot. Straight curb.	Cost price per lineal foot. Radius curb.	Length. Straight curb. Feet.	Length. Radius curb. Feet.	Cost.	Amount of assessment
Bloomington av..	Franklin av.......	24th st	Artificial	10	10	10	6	$ .38	....	2,366.40	....	$899.23	$838.58
Bryant av........	Lincoln av........	Summit av........	Artificial......	10	10	10	6	.38	....	600.30	....	228.11	228.00
Colfax av.........	Lincoln av........	Summit av	Artificial.......	10	10	10	6	.38	....	659.20	....	249.60	228.00
Colfax av.........	Douglas av........	Mt. Curve av......	Artificial.......	10	10	10	6	.38	....	609.10	....	231.46	231.24
Colfax av.........	Lincoln av	Franklin av.......	Artificial.......	10	10	10	6	.38	....	1,148.25	....	436.34	425.00
Cedar av..........	Washington av....	5th st.............	Sandstone.....	20	8	....	5	.65	$ .65	22.00	200.00	144.09	155.70
*Central av........	6th st. NE.........	7th st. NE.	Sandstone.....	20	8	..	5	....	....	....	....	....	....
Douglas av.......	Dupont av....	Fremont av......	Artificial.......	10	10	10	6	.38	....	1,051.65	....	399.63	399.10
Dupont av.........	Douglas av........	Mt. Curve av	Artificial.......	10	10	10	6	.38	....	358.70	....	136.31	138.40
Dupont av...... .	Douglas av	Franklin av.......	Artificial.......	10	10	10	6	.38	....	2,432.55	....	924.37	820.80
Elliot av..........	24th st............	26th st.	Artificial.......	10	10	10	6	.38	....	2,478.80	....	941.94	872.74
Emerson av......	Mt. Curve av......	Lincoln av........	Artificial.......	10	10	10	6	.38	....	1,884.35	....	716.05	651.43
Emerson av......	Lincoln av........	Franklin av....	Artificial......	10	10	10	6	.38	....	532.80	....	202.46	193.80
Fremont av......	Douglas av	Summit av........	Artificial.......	10	10	10	6	.38	....	300.10	....	114.04	114.00
Fremont av	Mt. Curve av	Douglas av..	Artificial.......	10	10	10	6	.38	....	270.80	....	102.90	97.38
Fourteenth av. S.	8th st..............	Franklin av.......	Artificial.......	10	10	10	6	.38	....	3,555.90	....	1,351.24	1,171.05
Girard av.........	Douglas av........	Franklin av.......	Artificial.......	10	10	10	6	.38	....	2,171.60	....	825.21	808.30
Girard av.........	24th st	25th st...........	Artificial......	10	10	10	6	.38	....	1,442.45	....	548.13	417.13
Groveland av.....	Hennepin av......	Mt. Curve av	Artificial......	10	10	10	6	.38	....	3,078.20	....	1,169.72	1,150.60
Harmon Place...	12th st............	Hennepin av.. ..	Artificial.......	10	10	10	6	.38	....	2,246.50	....	853.67	400.45
Harriet av........	Franklin av.	22d st..........	Artificial.......	10	10	10	6	....	....	....	....	....	435.04
Laurel av.........	Hennepin av......	Lyndale av	Artificial.......	10	10	10	6	.38	....	2,348.75	....	892.53	775.60
Lincoln av........	Hennepin av	Emerson av......	Artificial.......	10	10	10	6	.38	....	1,849.85	....	702.94	680.43
Lyndale av... ...	Erie av.	Ontario av	Artificial..	10	10	10	6	.38	....	501.80	....	190.68	....
Lyndale av.......	Western av..	6th av N...........	Granite.. ...	20	8	....	5	.64	64	3,094.10	168.20	2,087.87	2,181.31
Mt. Curve av.....	Emerson av.	Fremont av.	Artificial.......	10	10	10	6	.38	....	396.60	....	150.71	149.15

Pillsbury av	27th st	28th st	Artificial	10	10	10	6	.38	...	1,232.55	...	468.37	422.01
Summit av	Colfax av	Fremont av	Artificial	10	10	10	6	.38	...	1,828.65	...	694.89	615.60
Summit av	Hennepin av	Colfax av	Artificial	10	10	10	6	.38	...	833.70	...	316.81	405.57
†Taylor st	25th av. NE	26th av. NE	Artificial	10	10	10	6	.38	...	1,280.80	...	486.70	...
Third av. N	3d st	5th st	Granite	20	8	...	5	.64	.64	599.45	...	383.65	409.58
Third av. N	3d st	5th st	Sandstone	20	8	...	6	.65	.65	6.70	...	4.36	...
Third st. S	5th av. S	13th av. S	Granite	20	8	...	5	.64	.64	1,809.40	263.65	1,326.75	...
Third st. S	5th av	13th av	Sandstone	20	8	...	6	.65	.65	639.75	168.65	349.96	2,027.23
Tenth st. S.	Hennepin av	1st av. S	Sandstone	20	8		6	.65	.65	116.15	...	75.50	144.69
Tenth av. SE	8th st	9th st	Artificial	10	10	10	6	.38	...	754.40	...	286.67	289.45
*University av	Central av	5th av. SE	Sandstone	20	8	...	6	.65	.65	212.00	337.35	357.08	...
Washington av	5th av. N	14th av. N	Granite	20	8	...	5	.64	.64	4,819.25	470.00	3,385.12	3,624.43
‡Set by private parties on various streets and avenues			Artificial							6,191.00	...	3,095.50	...
‡Set by private parties on various streets and avenues			Granite							165.50	...	124.13	...
‡Set by private parties on various streets and avenues			Sandstone							46.00	...	34.50	...
Totals										55,664.65	1,607.85	25,909.82	21,595.72
Incidentals, including curb repairs and sidewalk repairs along curb										...	...	4,121.00	...
Grand Totals										55.664.65	1,607.85	$30,030.82	$21,595.72

*City portions, no assessments.
†Set in 1900, to be assessed in 1901.
§Set by city, money advanced by property owner.
‡No assessment, set by owner and cost estimated.

TABLE No. 15.

Summary of Sewers and Sewer Tunnels Constructed Prior to January 1st, 1901.

KIND.	Size in Inches.	TOTAL LENGTH.	
		Feet.	Feet.
Vitrified clay pipe	9	82.4	
Vitrified clay pipe	10	578.1	
Vitrified clay pipe	12	52,780.9	
Vitrified clay pipe	15	48,583.0	
Vitrified clay pipe	18	24,870.7	
Vitrified clay pipe	24	9,819.4	
			136,714.5
Cement pipe	12	97,044.1	
Cement pipe	15	52,751.8	
Cement pipe	18	19,934.1	
Cement pipe	24	1,183.9	
			170 913.9
Brick	18	46.7	
Brick	20	30.4	
Brick	24	263,204.0	
Brick	27	2,918.1	
Brick	30	59,349.3	
Brick	33	11,589.1	
Brick	36	35,562.6	
Brick	39	3,477.0	
Brick	40	3,872.2	
Brick	42	11.805.3	
Brick	44	3,675.5	
Brick	45	2,501.0	
Brick	48	7,082.9	
Brick	51	8,569.7	
Brick	54	10,925.2	
Brick	60	17,313.9	
Brick	63	1,318.6	
Brick	65	3,182.9	
Brick	66	2,315.4	
Brick	72	10,463.1	
Brick	75	1,234.3	
Brick	78	854.3	
Brick	80	466.0	
Brick	84	1,296.6	
Brick	86	1,604.0	
Brick	87	590.3	
Brick	90	7,781.9	
Brick	93	978.9	
Brick	96	14,555.9	
			484,356.4
Total ....149.999 miles.			791.993.8
Total number of manholes			5,303
Total number of lampholes			465
Total number of catch basins			4,175
Total number of flush tanks			81

Tunnels.

STREET.	FROM—	TO—	Length in Feet.
Eighth avenue south	River	Washington avenue	860
Eleventh avenue south	River	218.4 ft. N. of Second steeet	645
Fourth street south	River	Twenty-first avenue	940
Tenth avenue southeast	River	Second street	473
Northeast Minneapolis			7,235.3
Oak street			186
Second street northeast	Central avenue	Broadway street	4,550
East Twenty-sixth street	River	Riverside avenue	452.5
North Minneapolis			7,256.5
Third avenue northeast	River	89.5 ft. east of Jackson st.	3,586.7
University ave. northeast	First avenue	Third avenue	787
Fourth street northeast	First avenue	Third avenue	710.2
First avenue north	River	First street	690.2
Total feet			28,3726
Total miles			5,374
Total sewers and tunnels, feet			820,366.4
Total sewers and tunnels, miles			155.373

1900.

Cost of Sewer and Catch-Basins	Amount of Assessment.	Cost per foot of Sewer.	Cost per foot of Sewer and Catch-Basins.	B.—B Cl.—C G.—G H. P.— So. St.
$551.92	$760.05	$1.82	...	100 per
2,914.67	2,181.00	3.27	$3.44	30 per c
2,824.42	1,609.80	7.34	8.11	73 per c
2,519.74		6.93	7.11	70 per c
4,682.25	7,982.40	3.57	.....	30 per c
951.24	T'wds 33d st	2.49	.....	15 per c
2,717.74	1,755.45	3.98	4.20	5 per ce
2,451.97	1,959.00	2.80	3.04	18 per c
559.24	991.50	1.59	.	20 per c
1,055.66	3,204.00	2.49	2.68	100 per
1,973.84		2.16	2.31	35 per c
1.140.61	1,031.85	3.13	......	100 per
774 73	1,583.70	2.31	2.43	8 per ce
810 12		2.04	2 42	15 per c
1,017.82	3,388.80	3.04	......	45 per c
1,150.44		2.97	......	8 per ce
1,515.64		2.75	.....	100 per
1,163.14	2,142.00	2.73	2.95	100 per
1,128.53		2.29	2.49	100 per
1,790.23	3,286.80	2.61	2.81	80 per c
1,031.46		1.90	......	80 per c
1,817.14	2,757.90	1.93	.....	100 per
12,706.77	5,605.80	5.86	.....	100 per
2,041.78	1,251.90	3.31	3.63	100 per
1,705.37	1,580.85	3.11	.. .	100 per
2,255.05	1,524.00	3.29	3.56	90 per c
23,937.08	15,009.60	3.29	......	60 per c

TABLE NO. 18.

Sewer Connections and Mileage of Sewers by Wards.

Wards.	Sewer Connections.				Miles of Sewers.			Miles of Tunnels.
	Made prior to 1900.	Made in 1900.	Total	Total made per mile of sewers.	Prior to 1900.	Built in 1900.	Total.	
1	276	19	295	50.02	5.588	0.288	5.876	2.565
2	612	47	659	43.40	14.685	0.498	15.183	0.402
3	846	141	987	47.70	19.886	0.806	20.691	0.142
4	1,474	150	1,624	64.89	24.206	0.818	25.024	0.539
5	1,472	54	1,526	70.73	21.260	0.174	21.434	0.988
6	289	55	344	47.82	6.886	0.307	7.193	0.300
7	219	29	248	32.27	7.436	0.249	7.685	....
8	1,037	124	1,161	49.59	20.847	2.540	23.387	....
9	229	35	264	27.32	8.878	0.784	9.662	0.352
10	55	10	65	30.11	2.086	0.073	2.159	....
11	401	45	446	48.81	8.618	0.418	9.037	...
12	26	....	26	11.35	2.290	.... ..	2.290	0.086
13	7	1	8	21.23	0.060	0.317	0.377	....
Total	6,943	710	7,653	51.02	142.726	7.272	149.998	5.374

TABLE No. 19.

Summary of Cement Tested and Used During the Season of 1900.

BRAND.	Nationality.	Number of barrels inspected.	TENSILE STRAIN PER SQ. IN.						FINENESS PER CENT.		AVERAGE TIME OF SETTING.				Per cent. water used neat.	Per cent. water used 1 and 3.	REJECTED.	
			NEAT.			1 CEMENT, 2 SAND, NATURAL 1 CEMENT, 3 SAND, PORTL'ND					Initial.		Hard.					
			24 hrs.	7 days.	30 days.	24 hrs.	7 days.	30 days.	50 mesh sieve.	100 mesh sieve.	Hours.	Minutes.	Hours.	Minutes.			Number of barrels.	Per cent.
NATURAL CEMENT.																		
Louisville	....	3,175	128	144	257.5	47	63	......	89.5	79.5	....	....	....	....	....	....	50	1.6*
Milwaukee	....	5,495	98	113	214	40	56	......	90	79.8	....	....	....	....	....	....	200	3.7*
Mankato	....	6,450	120	183	291	49	86	......	92	81	....	....	..	....	....	....	.....	....
Utica	....	6,128	100	191	266	45	81	......	89	79.4	....	....	..	..	......	......	....	....
Totals	....	21,248	....	....	...	....	......	....	....	......	....	..	....	....	......	......	250	Av.1.2.
PORTLAND CEMENT.																		
Vulcanite	American	3,325	....	645	715.5	....	208	270	99.5	95.5	2	....	5	....	19	10	.....	....
Saylor	"	7,151	....	604	707	....	164	220	100	98	2	30	5	5	19	10	....	....
Sandusky	"	7,174	..	655	721	..	197	265	100	95	2	25	5	15	19.5	10	150	2.1†
Giant	"	2,900	....	620	671	....	191	256	98	89	1	5	5	30	22	11	150	5.2††
Atlas	"	2,950	....	618	677.5	....	178	233	100	96	2	10	6	5	18	10	....	....
Lehigh	"	2,275	...	603	710	....	176.5	241	100	95	1	55	6	....	23	11	225	9.9†
Alpha	"	725	....	739	739	....	242	296	100	96	1	42	3	....	22	11	.. ..	....
Hercules	German	100	....	433	675	....	161	213	97	91	1	5	5	15	28	11	.....	....
Marquette	American	2,450	....	608	665	....	184	240	100	97	2	45	5	20	20	10	.....	....
Wolverine	"	900	....	626	694	....	198	251.5	100	96	2	..	5	....	19	10	.....	....
Phœnix	"	750	...	710	692	....	219	296	99.5	98	1	30	3	25	20	10	.....	....
Clover Leaf	"	350	....	507	583	....	168	224	99	91	....	42	2	20	22	10.5	50	14.3*
Peerless	"	150	....	422	536	....	150	213	100	96.5	2	20	6	...	21	11	.....	....
Dragon	"	100	....	531	531	....	128	169	100	96	....	35	3	10	25	11	.....	....
Wyandotte	"	100	....	752	851	....	168	231	99	95	...	12	...	25	27	11	100	100.0**
Globe	"	100	....	320	425	....	127	202	97	94	2	20	5	15	26	10	100	100.0*
Chicago A. A.	"	300	....	805	858	....	151.5	191	100	96	1	20	3	22	20	10	300	100.0††
Totals	....	31,800	....	....	.....	....	......	....	......	......	....	....	..	....	......	......	1,075	Av.3.4.

Requirements—Portland cement, 24 hours in air and in water until broken; neat, 400 lbs.; 1 and 3, 125 lbs. in 7 days.
Natural cement, 1 hour in air, 23 hours in water; neat, 80 lbs.; 1 and 2, 30 lbs. in 24 hours.
Portland cement subject to cold pat and steam test in addition to above tests.

† Checked.
†† Failed in steam test.
** Too fast initial set.
* Too low for 7 days neat.

TABLE No. 20.

Chemical Analysis of Portland Cement, 1900.

Chas. W. Drew, M. D., Department of Health.

Constituents.		Kind.					
		Phoenix.	Marquette.	Chicago "AA"	Wolverine.	Wyandotte	Clover Leaf.
Silica	SiO_2	20.42	22.79	21.26	22.64	22.44	18.08
Alumina Oxide	Al_2O_3	7.40	8.36	9.30	9.60	6.90	7.00
Ferric Oxide	Fl_2O_3	2.40	2.24	.70	1.65	1.12	2.00
Calcium Oxide	CaO	59.78	54.50	60.20	59.60	57.98	57.25
Magnesium Oxide	MgO	4.72	2.01	1.58	2.14	1.70	2.81
Alkalies	Na_2O+K_2O	1.31	1.37	1.21	1.13	1.48	1.32
Sulphuric Oxide	SO_3	2.50	1.57	.39	.15	.84	.89
Carbonic Oxide	CO_2	1.36	7.22	5.06	2.94	7.00	10.06
Loss on Ignition		.30	.00	.21	.31	.57	.73
Totals		100.19	100.06	99.91	100.16	100.03	100.14

TABLE NO. 21.

Summary of Cement Inspection from 1885 to 1900, Inclusive.

YEARS.	LOUISVILLE.				MILWAUKEE.				MANKATO,				UTICA.				BUFFALO.				AKRON.	
	Accepted barrels.	Rejected barrels.	Per cent rejected.	Average tensile strain per sq. in. of accepted cement.	Accepted barrels.	Rejected barrels.	Per cent rejected.	Average tensile strain per sq. in. of accepted cement.	Accepted barrels.	Rejected barrels.	Per cent rejected.	Av. tensile strain per sq. in. of accepted cement.	Accepted barrels.	Rejected barrels.	Per cent rejected.	Av. tensile strain per sq. in. of accepted cement.	Accepted barrels.	Rejected barrels.	Per cent rejected.	Av. tensile strain per sq. in. of accepted cement.	Accepted barrels.	Average tensile strain per sq. in. of accepted cement.
1885...	7,145	50	0.7	108	5,011	637	11.27	97.5	669	77	10.32	97	......	....	....	....	....	....	.....	....	.....	....
1886...	9,409	84	0.88	93	4,319	150	3.35	75.5	105	......	......	85	......	....	...	....	....	....	.....	.....	.....	....
1887...	18,344	16	0.13	106.5	12,211	492	3.87	80	......	.....	......	......	......	....	....	......	....	....	.....	.....	.....	....
1888...	11,853	329	2.7	120	9,773	206	2.06	82.5	....	......	......	.....	......	....	....	....	....	....	.....	.....	.....	....
1889...	18,858	328	1.7	124.33	16,499	498	2.93	104.33	......	.....	......	.....	......	...	...	......	650	139	17.61	82.5	1,000	118.25
1890...	11,828	3	0.25	126.75	18,126	875	4.6	103.75	....	......	....	......	......	...	....	....	....	....	.....	.....	.....	....
1891..	5,931	200	3.26	118	11,641	714	5.78	101	......	......	......	......	......	....	....	....	....	....	.....	.....	.....	....
1892...	7,020	1,250	15.11	112.5	1,500	900	3.75	91	5,020	308	5.78	89	......	....	....	....	....	..	.....	.....	.....	....
1893...	3,150	....	.....	121.5	450	.....	......	96	5,000	700	12.28	114.5	......	....	....	....	...	....	.....	.....	.....	....
1894...	5,000	....	..	125.66	12,180	450	3.56	92.66	100	.....	....	82.5	......	....	....	......	...	....	.....	.....	.....	....
1895...	2,700	300	10	113	4,900	350	6.66	92	7,540	1,050	12.22	108.5	......	....	....	....	....	....	.....	.....	.....	....
1896...	820	300	26.8	124	29,100	4,200	12.66	102	15,000	2,850	15.96	99	......	....	....	....	....	....	....	.. .	.....	....
1897...	300	.....	.....	123	2,850	150	5.	90.5	5,765	.....	.....	112	......	....	....	.....	....	...	.....	.....	.....	....
1898...	750	......	.. ...	109	1,800	150	7.69	86.5	7,250	.....	. ..	103.7	5,700	300	5	90	....	....	.....	.....	.....	....
1899...	1,400	..		111.7	1,925	150	7.2	86.8	4,050	150	3.5	103.2	2,980	150	4.7	91.5	....	....	....	.....	.....	....
1900...	3,175	50	0.1	128	5,495	200	3.6	98	6,450	......	....	120	6,128	....	....	100.0	....	....	....	....	.....	....
Total.	107,683	2,910	2.7	....	137,780	10,122	7.3	....	56,949	5,135	9.	......	14,708	450	3.5	.....	650	139	17.61	82.5	1,000	118.25

TABLE NO. 22.

Work Done by Inspection Department in 1900.

Wards.	Sewer Connections.			Water Connections.			Inspections in 1900.	
	Made prior to 1900.	Made in 1900	Total.	Made prior to 1900.	Made in 1900.	Total.	Kind.	No.
1	276	19	295	698	45	743	Sewer............	710
2	612	47	659	1,092	90	1,182	Water............	1,340
3	846	141	987	2,315	251	2,566	Repair...........	662
4	1,474	150	1,624	2,308	205	2,513	Extension.........	93
5	1,472	54	1,526	3,068	92	3,160	Gas..	90
6	289	55	344	906	96	1,002	Telephone	1
7	219	29	248	1,046	83	1,129	Electric..	6
8	1,037	124	1,161	2,539	181	2,720	Telegraph.........	....
9	229	35	264	1,080	117	1,197	....	....
10	55	10	65	502	64	566	....	....
11	401	45	446	968	69	1,037	....	....
12	26	....	26	187	5	192	....	....
13	7	1	8	276	42	318	....	....
....	....	....	....	....	....	3,600	Made prior to 1885	....
Totals..	6,943	710	7,653	16,985	1,340	21,925	....	2,902

COST.

Inspection, pay roll..................			$5,582.07
Paid to city for inspection............		$3,014.50	
Paid to city for repaving............	$1,799.90		
Cost to city for repaving..............	1,024.20	775.70	3,790.20
Net cost to city for inspection..			$1,791.87

Wood paving, square yards..............................	4415	$1,302.82
Stone paving, square yards............................	308	137.37
Asphalt paving, square yards..........................	118	269.48
Brick paving, square yards..........	52.5	90.23
Total..	4,893.5	$1,799.90
Cost per inspection...............................$1.93		

TABLE No. 23.

Sidewalk Laid During the Season of 1900.

The cost of sidewalks is assessed to abutting property. Property owners are allowed to lay their own sidewalks subject to the inspection of this department. Men are employed and paid by the lineal foot to lay plank walks not laid by the owners. Stone walks laid by the city are laid by contract.

STREET.	From—	To—	Side.	Width in feet.	LENGTH.				
					Artificial stone laid by owner. Lineal feet.	Artificial stone laid by city. Lineal feet.	Plank walk laid by owner. Lineal feet.	Plank walk laid by city Lineal feet.	Total Feet.
FIRST WARD—									
Broadway st	Main st	University av	Both	6		292			292
Central av	Third st	Fourth st	West	8	200				200
Eighth av NE	Ramsey st	Fifth st	Both	6	163				163
First av NE	Main st	Second st	South	6		342			342
Fourth st NE	Broadway st	Eighteenth av	Both	6		40			40
Fourteenth av NE	Ramsey st	Third st	Both	6	1,277				1,277
Fourteenth av NE	Grand st	Main st	North	6	283				283
Fifteenth av NE	University av	Fourth st	Both	6	127				127
Grant st	Sixteenth av NE	Twenty-seventh av NE	Both	6	864	1,711			2,575
Main st NE	Fifteenth av NE	Eighteenth av NE	Both	6		399			399
Main st NE	Sixteenth av NE	Seventeenth av NE	West	6		59			59
Maple st	Island av	Island av	Both	4	170				170
Marshall st	Sixth av	Seventh av	East	15	21				21
Marshall st	Eighth av NE	Twenty-fifth av NE	Both	6		277			277
Ninth av NE	University av	Fifth av	Both	6	131	42			173
Nineteenth av NE	Second st	Fifth st	Both	6	649	280			929
Sixth av NE	Marshall st	Fifth st	Both	6	113	895			1,008
Sixteenth av NE	California st	Third st	Both	6	127	82			209
Sixteenth av NE	Marshall st	Main st	Both	6	899	129			1,028
Seventh av NE	Sibley st	University av	Both	6	173	352			525
Seventeenth av NE	Second st	Third st	North	6		340			340
Third st NE	Twelfth av	Seventeenth av	Both	6	187	174			361
Third st NE	Broadway st	Eighteenth av NE	Both	6	1,125	440			1,565
Twelfth av NE	Main st	Second st	Both	6	505	90			595
Twelfth av NE	Second st	Fourth st	Both	6	76				76
Thirteenth av NE	Ramsey st	Fifth st	Both	6		274			274
Twenty-second av NE	Marshall st	Second st	North	6		135			135

Table No. 23.—*Continued.*

Street.	From—	To—	Side.	Width in feet.	Lenght.				
					Artificial stone laid by owner. Lineal feet.	Artificial stone laid by city. Lineal feet.	Plank walk laid by owner. Lineal feet.	Plank walk laid by city. Lineal feet.	Total Feet.
First Ward—	*Continued.*								
Twenty-fifth ave. NE	Marshall st	Fifth st	Both	6	331	189			520
Twentieth ave. NE	Third st	University av	North	6		162			162
University ave. NE	Sixth av	Seventh av	West	6	142				142
University ave. NE	Broadway st	Twenty-sixth av	Both	6	1,328	700			2,028
Totals					8,891	7,404			16,295
Cost Walk					$4,414.42	$3,702.00			$8,116.42
Cost Inspection					181.60	151.23			332.83
Cost Total					$4,596.02	$3,853.23			$8,449.25
Second Ward—									
Arthur av	Malcom av	S. line of Addition	East	6	179	218			397
Beacon st	Pleasant st	Oak st	Both	6	82	270			352
Bedford av	Hamlin av	Sharon av	West	6	100	100			200
Como av	Fifteenth av. SE	Sixteenth av. SE	East	6	135				135
Delaware st	Harvard st	Walnut st	North	6	288				288
Delaware st	Walnut st	Oak st	Both	6	145				145
Essex st	Union st	Harvard st	South	6	140				140
Eighth st. SE	Third av	Fifth av	South	6		50			50
Eighth st. SE	Eleventh av	Twelfth av	Both	6	122	220			342
Eighteenth av. SE	Como av	Talmage av	East	6	45				45
Fourth st SE	Eleventh av	Railroad	Both	6	156				156
Fifth st. SE	Second av	Twelfth av	North	6	440				440
Fifth st. SE	Fifteenth av	Sixteenth av	North	6		234			234
Fifth av. SE	Fourth st	Fifth st	West	6	187				187
Fifteenth av. SE	Sixth st	Seventh st	West	6	130	50			180
Fifteenth av. SE	Como av	Elm st	East	6		828			828
Harvard st	Beacon st	Delaware st	Both	6	538	138			676
Lennox av	Darmouth av	Yale av	West	6	79				79
Malcolm av	University av	Arthur av	West	6	1,073				1,073
Ninth st. SE	Third av	Fifth av	Both	6	181	120			301
Oak st SE	University av	Fourth st	Both	6	188	74			262
Oak st SE	Beacon st	University av	West	6		212			212
Orlin av	Bedford st	Malcom av	Both	6	375				375
Seymour av	Orlin av	Clarence av	Both	6	221				221

State st	Arlington st	Washington av SE	West	6		66			66
Seventh st SE	Central av	Sixteenth av	Both	6	410	288			698
Seventh av SE	Sixth st	Seventh st	North	6	8				8
Seventeenth av SE	Fourth st	Fifth st	East	6	84				84
Sixteenth av SE	Sixth st	Seventh st	West	6	199				199
Third av SE	Second st	University av	North	6		185			185
Thirteenth av SE	Seventh st	Eighth st	West	6	46				46
Twelfth av SE	Seventh st	Railroad	Both	6	163	139			302
University av SE	Twenty-fourth av	Mary st	Both	6	100	517			617
Union st SE	Beacon st	Delaware st	West	6	556				556
Walnut st	Delaware st	Essex st	East	6	164				164
Walnut st	Washington av SE	Fourth st	West	6	83	621			704
Totals					6,617	4,330			10,947
Cost.. Walk					$3,308.50	$2,165.00			$5,473.50
Inspection					201.19	131.64			332.83
Total					$3,509.69	$2,296.64			$5,806.33
THIRD WARD—									
Aldrich av	Sixth av N	Twenty-second av N	Both	6	641	1,110			1,751
Bryant av	Twelfth av N	Twenty-second av N	Both	6	664	286			950
Crystal Lake av	Irving av	James av	South	8	122				122
Crystal Lake av	James av	Penn av	Both	6	378	556			934
Dupont av	Eleventh av N	Twenty-sixth av N	Both	6	231	256			487
Elwood av	Eighth av	Tenth av N	West	6	68				68
Emerson av	Eighth av. N	Twenty-fifth av. N	Both	6	579	162			741
Eighth av. N	Bradford av	Logan av	Both	6	637	429			1,066
Eleventh av. N	Lyndale av	Emerson av	Both	6	270	276			546
Eighteenth av. N	First st	Bryant av	Both	6	679	365			1,044
Fremont av	Eighth av. N	Twenty-sixth av. N	Both	6	949	1,279			2,228
First st. N	Third av	Plymouth av	East	8	15	35			50
Fourth st. N,	Third av	Twenty-sixth av	Both	8	138	336			474
Fourth st. N	Fourteenth av	Twenty-first av	Both	6		120			120
Fifth st	Sixth av. N	Eleventh av. N	Both	8		152			152
Fifth st	Ninth av. N	Twentieth av. N	Both	6	299	78			377
Fourteenth av. N	Second st	Girard av	Both	6	1,581	479			2,060
Fifteenth av. N	Washington av	Fremont av	Both	6	453	159			612
Girard av	Sixth av. N	Plymouth av	Both	6	514	1,183			1,697
Highland av	Royalston av	Royalston av	East	6	50				50
Hoag av	Sixth av. N	Seventh av. N	East	6		84			84
Humboldt av	Eighth av. N	Eleventh av. N	East	6	59				59
Irving av	Crystal Lake av	Hillside av	West	6		95			95
James av	Hillside av	James av	North	6	50	335			385
Knox av	Tenth av. N	Twelfth av. N	Both	6		100			100
Logan av	Eighth av. N	Plymouth av	Both	6	92	862			954
Lyndale av. N	Eighth av	Sixteenth av	Both	6	230				230

TABLE NO. 23.—*Continued.*

STREET.	From—	To—	Side.	Width in feet.	LENGTH.				
					Artificial stone laid by owner. Lineal feet.	Artificial stone laid by city. Lineal feet.	Plank walk laid by owner. Lineal feet.	Plank walk laid by city. Lineal feet.	Total Feet.
THIRD WARD—	*Continued.*								
Nineteenth av. N.	Second st	Washington av	Both	6		352			352
Oliver av.	Plymouth av	Fifteenth av	Both	6	361	80			441
Plymouth av.	Emerson av	Fremont av	South	6	158	180			338
Penn av.	Twenty-third av. N.	Crystal Lake av	West	6	160				160
Second st. N.	Plymouth av	Twenty-fourth av. N.	Both	8	150	414			564
Sixth av. N.	Oak Lake av	Emerson av	North	6	36	100			136
Sizth st. N.	Sixth av	Twenty-fifth av. N.	Both	6	620	153			773
Seventh av N.	Third st	Bradford av.	Both	6	50	174			224
Sixteenth av N.	First st	Fremont av.	Both	6	160	280			440
Seventeenth av N.	Second St.	Dupont av.	Both	6	1,210	534			1,744
Third st N.	Fourteenth av.	Twenty-fifth av	Both	6	426	231			657
Tenth av N	Fourth st	Eighth st	Both	6	320	251			571
Tenth av N	Irving av	Logan av	Both	6	195	320			515
Twelfth av N.	Emerson av.	Logan av	Both	6	390	526			916
Twentieth av N	Pacific st	Fremont av.	Both	8	415	423			838
Twentieth av N.	Second st	Girard av.	Both	6		278			278
Twentieth av N	Girard av.	Irving av	Both	8	55	376			431
Twenty-first av N.	Second st	Bryant av.	Both	6	644	644			1,288
Twenty-second av N.	Dupont av.	Emerson av	South	6		161			161
Twenty-third av N.	Second st	Third st	Both	6	660	326			986
Twenty-fourth av N.	Second st	Fremont av.	Both	6	558	391			949
Twenty-fifth av N.	Fourth st	Sixth st.	North	6	158				158
Twenty-sixth av N.	Fourth st	Sixth st.	Both	6	208				208
Washington av N.	R. R.	Fifteenth av.	East	8		360			360
Washington av N.	R. R.	Fifth av.	East	10		81			81
Totals					15,633	15,372			31,005
Cost. Walk.					$7,959.70	$6,661.40			$15,621.10
Cost. Inspection.					167,81	165.02			332.83
Cost. Total.					$8,127.51	$6,826.42			$15,953 93
FOURTH WARD—									
Aldrich av N.	Fifth av.	Laurel av.	Both	6	115	100			215
Aldrich av.	Western av.	Fourth av N.	Both	6		44			44
Bryant av.	Hawthorn av	Summit av.	Both	6		727			727
Bryant av.	Third av N.	Fourth av N.	West	6		20			20

Cedar Lake Road	Second av N	Bridge	West	6	720	582			1,302
Chestnut av	Seventeenth st	Lyndale av	South	6	59	159			218
Clifton av	Vine Place	Clifton Place	North	6		124			124
Colfax av	Fifth av	Franklin ave	Both	6	128	1,725			1,853
Dupont av	Douglas av	Summit av	Both	6	343	601			944
Dell Place	Lyndale av	Dell Place	Both	6	140	182			322
Douglas av	Colfax av	Fremont av	North	6		810			810
Emerson av N	Fifth av	Sixth av	West	6		472			472
Emerson av N	Douglas av	Franklin av	Both	6	406	713			1,119
Erie av	Lyndale av	Aldrich av	North	6	93				93
Eighth st	Nicollet av	First av S	North	10½	123				123
Franklin av	Vine Place	Dupont av	North	8	239	426			665
Franklin av	Lyndale av	Pleasant av	North	8	237	50			287
Forest av	Lyndale av	Dell Place	North	6	74	166			240
Fremont av	Western av	Sixth av N	East	6		441			441
Fremont av	Douglas av	Franklin av	Both	6	1,283	528			1,811
First av N	First st	Sixth st	West	15	326				326
Fourth av N	Irving av	James av	North	6		129			129
Fourth st N	First av	Third av	Both	15	259				259
Fifth av N	Lyndale av	Logan av	Both	6	306	169			475
Fifth st North	First av	Second av	South	14	89				89
Fourteenth st	Nicollet av	Vine Place	South	6		60			60
Fifth st	Nicollet av	Spruce Place	Both	6		30			30
Fifteenth st	Chestnut av	Linden av	West	6	25				25
Girard av N	First av	Fourth av	Both	6	40	964			1,004
Girard av	Summit av	Franklin av	Both	6	138	100			238
Grant st	Vine place	Nicollet av	Both	6	138	84			222
Groveland av	Emerson av	Bryant av	North	6		352			352
Groveland av	Clifton place	Pillsbury av	Both	6		914			914
Harmon place	Thirteenth st	Spruce place	West	6	77				77
Hawthorn av	Aldrich av	Bryant av	Both	6	60				60
Humboldt av	Western av	Sixth av	Both	6	198	163			361
Humboldt av	Mt. Curve av	Lincoln av	Both	6	1,063	188			1,251
Hennepin av	Douglas av	Summit av	East	6	305				305
Irving av	Western av	Sixth av N	North	6	33	431			464
Irving av	Summit av	Franklin av	Both	6	1,657				1,657
Irving av	Western av	Sixth av N	North	6	33	431			464
James av	Douglas av	Summit av	East	6	317				317
Knox av	Fourth av N	Western av	Both	6		146			146
Laurel av	Aldrich av	Bryant av	North	6		143			143
Lincoln av	Hennepin av	Dupont av	North	6		651			651
Lyndale av	Chestnut av	Summit av	Both	6	764	407			1,171
Newton av	Fourth av N	Fifth av N	West	6		80			80
Nicollet av	Grant st	Angle	West	8	453				453
Nicollet av	Thirteenth st	Grant st	East	6	80				80
Nioollet av	Fourth st	Eighth st	Both	8	381				381
Ninth st S	Nicollet av	First av	South	4½	60				60
Mt. Curve av	Bryant av	Waverly place	North	6	113	447			560

TABLE NO. 23.—*Continued.*

STREET.	From—	To—	Side.	Width in feet.	LENGTH.				
					Artificial stone laid by owner. Lineal feet.	Artificial stone laid by city. Lineal feet.	Plank walk laid by owner. Lineal feet.	Plank walk laid by city. Lineal feet.	Total Feet.
FOURTH WARD—	*Continued.*								
Oak Grove st	Spruce place	Hennepin av	North	6	121				121
Oak Grove st	Clifton place	Vine place	North	6	53				53
Ontario av	Lyndale av	Aldrich av	South	6	84				84
Pillsbury av	Groveland av	Franklin av	East	6	40	466			506
Second av. N	Fourth st	Fifth st	East	15	166				166
Summit av	Dupont av	James av	Both	6	331	415			746
Sixth st. N	First av	Second av	North	8		277			277
Sixteenth st	Chestnut av	Linden av	East	6		305			305
Seventeenth st	Chestnut av	Linden av	West	6	153				153
Third av. N	Fifth st	Sixth st	West	14 3-10	36				36
Twelfth st	Yale Place	Harmon Place	South	6	169				169
Thirteenth st	Hennepin av	Harmon Place	South	6	168				168
Vine Place	Ninth st	Thirteenth st	East	6	334				334
Western av	Lyndale av	Aldrich av	North	6	25	25			50
Western av	Penn av	Queen av	North	6		84			84
Western av	Vincent av	Railroad	South	6				331	331
Washington av	First av. N	Second av. N	West	17 7-10	21				21
Totals					12,496	15,411		331	28,238
Cost Walk					$7,034.03	$6,886.94		$89.37	$14,010.34
Inspection					147.27	181.64		3.92	332.83
Total					$7,181.30	$7,068.58		$93.29	$14,343.17
FIFTH WARD—									
Chicago av	Ninth st	Twenty-second st	Both	6	364	136			500
Clinton av	Fourteenth st	Twenty-second st	Both	6	175	266			441
Columbus av	Franklin av	Twenty-second st	East	6	318				318
Columbus av	Eighteenth st	Franklin av	West	8	10				10
Elliot av	Nineteenth st	Twenty-second st	West	6		270			270
Eighth av. S	Sixth st	Seventh st	East	8	165				165
Eighth av. S	Sixth st	Seventh st	Both	6	118				118
Eighth st. S	Eighth av	Ninth av	South	8		152			152
Eleventh st	Fourth av	Fifth av	South	8		70			70
Eighteenth st	Stevens av	Tenth av	Both	6	497	740			1,237
Franklin av	First av S	Tenth av	Both	6	579	680			1,259

First av S	Twelfth st	Thirteenth st	East	8		171			171
First av S	Fifteenth st	Twenty-fourth st	Both	6	1,021	684			1,705
Fourth av S	Franklin av	Twenty-second st	West	10		20			20
Fourth av S	Fourteenth st	Twenty-fourth st	Both	6	308	377			685
Fourth av S	Eleventh st	Grant st	East	6		130			130
Fourth st S	Sixth av	Seventh av	North	6	66				66
Fourth st S	Ninth av	Tenth av	South	6	80				80
Fifth av S	Sixteenth st	Twenty-fourth st	West	6	364	854			1,218
Fifth st S	Eighth av	Ninth av	North	8	80	66			146
Fourteenth st	Nicollet av	Chicago av	Both	6	315	670			985
Fifteenth st	Nicollet av	Chicago av	Both	6	199	770			969
Grant st	Third av S	Fifth av S	South	6	75	40			115
Nicollet av	Grant st	Fifteenth st	East	8		212			212
Ninth av S	Fourth st	Ninth st	Both	8	278	110			388
Ninth st S	Eighth av	Ninth av	North	8	42				42
Nineteenth st	First av	Park av	Both	6	321	810			1,131
Oakland av	Franklin av	Twenty-fourth st	Both	6	83	90			173
Stevens av	Grant st	Twenty-second st	East	6	350	472			822
Second av S	Washington av	Franklin av	Both	6	468	639			1,107
Second av S	Washington av	Third st	West	14	163				163
Sixth av S	Fifth st	Sixth st	East	8	75	50			125
Sixth st S	Third av	Tenth av	Both	8	81	66			147
Sixth st S	Fourth av	Fifth av	North	6	67				67
Sixteenth st	Nicollet av	Chicago av	Both	6	52	558			610
Seventh av S	Third st	Fourth st	West	15	12				12
Seventh st	Seventh av	Eighth av	North	2	40				40
Seventeenth st	First av	Park av	Both	6	371	355			726
Third av S	Sixth st	Seventh st	Both	8	189				189
Third av S	Fifteenth st	Twenty-second st	Both	6	693	50			743
Tenth av S	Seventeenth st	Twenty-fourth st	West	6	127	243			370
Twelfth st S	First av S	Second av	North	8		153			153
Twenty-first st	Chicago av	Tenth av S	Both	6	90	35			125
Twenty-second st	Nicollet av	Tenth av S	Both	6	757	719			1,476
Twenty-fourth st	Clinton av	Tenth av S	North	6		185			185
Totals					8,993	10,843			19,836
Cost Walk					$4,147.28	$5,606.17			$9,753.45
Inspection					150.89	181.95			332.84
Total					$4,298.17	$5,788.12			$10,086.29
SIXTH WARD—									
Cedar av	Bluff st	Second st	Both	4	163	167			330
Cedar av	Sixth st	Seventh st	West	8		108			108
Eleventh av S	Washington av	Seventh st	Both	8	171	1,008			1,179
First st S	Thirteenth av	Fourteenth av	South	6		72			72
First st S	Nineteenth av	Twentieth av	Both	8	158	73			231

TABLE NO. 23 —*Continued.*

STREET.	From—	To—	Side.	Width in feet.	LENGTH. Artificial stone laid by owner. Lineal feet.	Artificial stone laid by city. Lineal feet.	Plank walk laid by owner. Lineal feet.	Plank walk laid by city. Lineal feet.	Total Feet.
SIXTH WARD—	*Continued.*								
Fourth st S	Twelfth av	Twenty-first av	Both	8	656	657			1,313
Fourth st S	Fifteenth av	Twenty-first av	Both	8	153				153
Fifth st S	Tenth av	Twenty-first av	Both	8	436	1,024			1,460
Fourteenth av S	First st	Seventh st	Both	8	709	846			1,555
Fifteenth av S	Second st	Railroad	Both	8	248	432			680
Locust st	Twenty-second av	Bjornsen av	Both	6		40			40
Nineteenth av S	Bluff st	Seventh st	Both	8	1,232	473			1,705
Nineteenth av S	Fifth st	Seventh st	East	6	109				109
Riverside av	Fourth st	Twenty-third av S	Both	8	97	38			135
Riverside av	Fourth st	Twenty-third av	Both	15	988	955			1,943
Second st	Twelfth av S	Twenty-second av S	Both	8	365	391			756
Sixth st S	Eleventh av	Twenty-seventh av	Both	8	1,677	538			2,215
Seventh st S	Tenth av	Twenty-seventh av	North	8	1,358	540			1,898
Sixteenth av S	Fifth st	Seventh st	Both	8	472	576			1,048
Seventeenth av S	Fifth st	Seventh st	Both	8	125	193			318
Two-and-a-half st	Cedar av	Twentieth av S	South	8	212	57			269
Third st	Twelfth av S	Twenty-second av. S	Both	8	1,524	804			2,328
Tenth av S	Fourth st	Seventh st	East	8		726			726
Twelfth av S	First st	Sixth st	Both	8	565	631			1,196
Thirteenth av S	First st	Sixth st	Both	8	684	745			1,429
Twentieth av S	R. R	Seventh st	Both	8	1,295	549			1,844
Twenty-first av S	R. R	Sixth st	Both	8	71	171			242
Twenty-first av S	Second st	Fifth st	West	6	468				468
Twenty-second av S	Fourth st	Seventh st	Both	8	495	392			887
Twenty-fourth av S	Sixth st	Seventh st	Both	8	180				180
Twenty-fifth av S	Sixth st	Seventh st	Both	8	232				232
Washington av S	Twelfth av	Cedar av	Both	18	88	198			286
Washington av S	Cedar av	Nineteenth av S	South	8	66	119			185
Total					14,997	12,523			27,520
Cost. Walk					$10,377.22	$8,877.02			$19,256.24
Cost. Inspection					181.38	151.46			332.84
Cost. Total					10,558.60	9,028.48			19,589.08

SEVENTH WARD—									
Bloomington av.	Twenty-fourth st	Thirty-third st	Both	12	53	118			171
Bloomington av.	Twenty-fourth st	Thirty-fifth st	Both	6	616	3,097			3,713
Cedar av	Twenty-fourth st	Lake st	Both	6	162	289			451
Cedar av.	Twenty-eighth st	R. R	East	8	100	167			267
Chicago av	Twenty-eighth st	Twenty-ninth st	East	3½		151			151
Chicago av	Thirty-fourth st.	Thirty-fifth st	East	6	318	454			772
Elliot av.	Thirty-fourth st.	Thirty-sixth st	Both	6	604				604
Eleventh av S.	Twenty-ninth st	Lake st	Both	6	409	729			1,138
Eighteenth av S	Twenty-fourth st	Twenty-eighth st	Both	6	653	575			1,228
Fourteenth av S	Twenty-ninth st	Thirty-first st	Both	6		645			645
Fifteenth av S	Twenty-fourth st	Thirty-second st	Both	6	314	365			679
Lake st	Thirteenth av	Bloomington av.	Both	8	270	582			852
Sixteenth av S	Twenty-fourth st	Twenty-seventh st	Both	6	830	904			1,734
Seventeenth av S	Twenty-fifth st	Lake st	Both	6	390	1,250			1,640
Tenth av S	Twenty-eighth st.	Lake st	Both	6	476	849			1,325
Twelfth av S	Twenty-sixth st	Twenty-eighth st.	Both	6	715	139			854
Thirteenth av S	Twenty-sixth st	Twenty-seventh st	East	6	30				30
Twentieth av S	Lake st	Thirty-first st	East	6		250			250
Twenty-fourth st	Chicago av	Elliot av	South	6	125				125
Twenty-fifth st S	Fifteenth av.	Cedar av.	Both	6	720	380			1,100
Twenty-sixth st	Fourteenth av S.	Eighteenth av S.	Both	6	385	519			905
Twenty-sixth st.	Fifteenth av S	Eighteenth av S.	Both	6	123	257			380
Twenty-eighth st	Chicago av	Cedar av.	Both	6	1,335	690			2,025
Thirtieth av S.	Twenty-sixth st	Twenty-seventh st	West	6		48			48
Thirty-second st	Fourteenth av S	Cedar av.	Both	6	624	1,208			1,832
Thirty-fifth st	Ninth av S	Tenth av S	South	6	124				124
Total					9,477	$13,666			$23,143
Cost. Walk					$4,823.14	$6,978 02			$11,801.16
Cost. Inspection					136.28	196.56			332.84
Cost. Total					$4,959.42	$7,174.58			$12,134.00
EIGHTH WARD—									
Aldrich av.	Franklin av	Thirty-third st	Both	6	973	1,369			2,342
Blaisdell av	Franklin av	Thirty-second st	Both	6	270	588			858
Bryant av	Franklin av	Twenty-eighth st	Both	6	262	560			822
Chicago av	Twenty-fifth st	Twenty-sixth st	West	6	42				42
Clinton av.	Lake st	Thirty-second st	Both	6	124	325			449
Columbus av	Thirty-third st	Thirty-fourth st.	West	6	39				39
Colfax av	Hennepin av	Twenty-seventh st	Both	6	80	249			329
Colfax av	Franklin av	Thirty-fourth st	Both	6	366	2,441			2,807
Dupont av.	Twenty-second st	Twenty-eighth st	Both	6	497	1,011			1,508
Emerson av	Twenty-fourth st	Twenty-eighth st	Both	6	383	168			551
Franklin av	Penn av.	Lake Isles Boulevard	South	8		500			500
Franklin av	Aldrich av	Hennepin av	South	6	124	295			419
Fremont av	Twenty-sixth st	Lake st	Both	6	511	392			903

TABLE NO. 23.—*Continued.*

STREET.	From—	To—	Side.	Width in feet.	LENGTH. Artificial stone laid by owner. Lineal feet.	Artificial stone laid by city. Lineal feet.	Plank walk laid by owner. Lineal feet.	Plank walk laid by city. Lineal feet.	Total Feet.
EIGHTH WARD—	*Continued.*								
First av. S.	Twenty-fifth st.	Thirty-fourth st.	Both	6	192	60			252
Fourth av. S.	Twenty-fourth st.	Thirty-third st.	Both	6	350	291			641
Fifth av. S.	Twenty-fourth st.	Thirty-second st.	Both	6	383	45			428
Garfield av	Twenty-fourth st.	Thirty-second st.	Both	6	512	1,066			1 578
Girard av.	Twenty-fifth st.	Twenty-eighth st.	Both	6	100	79			179
Grand av.	Twenty-second st.	Lake st	Both	6	40	360			400
Harriet av.	Twenty-fifth st.	Thirty-first st.	Both	6	297	1,405			1,702
Hennepin av	Lake st	Thirty-second st.	Both	6	138	532			670
Humboldt av	Franklin av.	Thirty-first st.	Both	6	784	80			864
Irving av	Twenty-second st.	Thirty-fourth st	East	6	305	462			767
Irving av	Twenty-second st.	Thirty-fourth st.	East	8	100				100
James av	Franklin av.	Thirty-first st.	West	6		1,117			1,117
Lake st	Oakland av.	Knox av.	Both	6	1,129	2,344			3,473
Lake st	Fremont av.	Oakland av.	Both	8		1,129			1,129
Lake st	First av S.	Clinton av.	Both	6	481	134			615
Lyndale av	Franklin av.	Lake st	Both	8	94	518			612
Lyndale av	Twenty-fourth st.	Thirty-second st	Both	6	335	560			895
Lyndale av	Twenty-ninth st	Lake st	West	20	91				91
Motor av	Lake st	Thirty-second st	Both	4	80	688			768
Nicollet av	Twenty-fifth st.	Thirty-fourth st.	Both	6	277	57			334
Oakland av.	Twenty-fourth st.	Thirty-second st	Both	6	507	1,562			2,069
Park av.	Twenty-second st.	Twenty-eighth st.	Both	8	32				32
Penn av.	Franklin av.	Twenty-first st	West	6	230	192			422
Pillsbury av	Twenty-sixth st.	Thirty-fourth st.	Both	6	776	2,096			2,872
Pleasant av.	Twenty-second st.	Thfrty-fourth st.	Both	6	172	573			745
Portland av.	Twenty-fifth st.	H. & D. R. R	West	8	51	8			59
Sheridan av.	Franklin av.	Twenty-first st.	West	6	180	319			499
Stevens av.	Twenty-eighth st.	Thirty-seventh st.	Both	6	377	91			468
Second av S.	Twenty-fifth st.	Thirty-fourth st.	Both	6	208	410			618
Third av S	Twenty-fifth st.	Thirty-third st.	Both	6	729	1,077			1,806
Twenty-first st.	Penn av.	Queen av.	North	6		321			321
Twenty-second st.	Nicollet av.	Lyndale av.	Both	6		179			179
Twenty-second st.	Irving av.	James av.	North	6		313			313
Twenty-fourth st.	Nicollet av.	Portland av.	Both	6	465	380			845
Twenty-fifth st.	Nicollet av	Oakland av.	North	6		194			194
Twenty-fifth st.	Girard av.	Fifth av S	Both	6	396				396
Twenty-sixth st.	Harriet av.	Lyndale av.	South	6	265				265

Twenty-sixth st	Aldrich av	Portland av	Both	6	425				425
Twenty-sixth st	Clinton av	Fourth av	North	6		116			116
Twenty-seventh st	Hennepin av	Chicago av	Both	6	310	501			811
Twenty-seventh st	Nicollet av	Fremont av	Both	6	607	305			912
Twenty-eighth st	Colfax av	Dupont av	South	6	91				91
Twenty-ninth st	Nicollet av	Pleasant av	Both	6	253	93			346
Thirty-first st	Blaisdell av	Calhoun Boul	Both	6	256	2,959			3,215
Thirty-first st	First av S	Stevens av	South	6	131				131
Thirty-second st	Blaisdell av	Pleasant av	Both	6	312				312
Thirty-second st	First av S	Aldrich av	Both	6	158	259			417
Thirty-third st	Pleasant av	Chicago av	Both	6	259				259
Thirty-fourth st	First av S	Stevens av	North	6	272				272
Total					16,820	30,773			47,593
Cost.. Walk					$8,547.68	$15,621.22			$24,168.90
Cost.. Inspection					117.61	215.23			332.84
Cost.. Total					$8,665.29	$15,836.45			$27,501.74
NINTH WARD—									
Buchanan st	Twenty-fourth av NE	Twenty-fifth av NE	East	6		141			141
Central av	Twentieth av NE	Twenty-second av NE	East	16	54				54
Central av	Spring st	Twenty-ninth av NE	Both	6	224	1,930			2,154
Eighteenth av NE	Jackson st	Taylor st	Both	6	705				705
Eighteenth & ½ av NE	Central av	Taylor st	Both	6	305				305
Filmore st	Winter st	Twenty-fifth av NE	Both	6	591	534			1,125
Fifth st NE	Thirteenth av	Fifteenth av	East	6		41			41
Fifteenth av NE	Adams st	Jefferson st	South	6	132	135			267
Jackson st	Nineteenth av NE	Twenty-fourth av	East	6	173				173
Jefferson st	Spring st	Summer st	East	6	61				61
Jefferson st	Spring st	Summer st	East	6	27				27
Jefferson st	Fifteenth av NE	Seventeenth av NE	East	6	213	350			563
Johnson st	Twenty-second av NE	Twenty fifth av N.E	West	6		1,102			1,102
Lincoln st	Summer st	Spring st	West	6	40	556			596
Lincoln st	Nineteenth av NE	Twenty-fifth av NE	Both	6	250	567			817
Madison st	Thirteenth av NE	Seventeenth av NE	Both	6	154	98			252
Monroe st	Thirteenth av NE	Twenty seventh av NE	Both	6	787	1,133			1,920
Pierce st	Winter st	Twenty fifth av NE	Both	6	202	1,049			1,251
Polk st	Eighteenth av NE	Twenty-ninth av NE	Both	6	2,098	3,454			5,552
Quincy st	Third av NE	Twenty-seventh av NE	Both	6	211	545			756
Spring st NE	Quincy st	Monroe st	South	6	137				137
Sixth st NE	Eighteenth av NE	Twenty fourth av	Both	6	677	320			997
Seventeenth av NE	Fifth st	Jefferson st	Both	6	578	132			710
Taylor st	Eighteenth av NE	Twenty-ninth av	Both	6	1,404	1,003			2,407
Thirteenth av NE	Madison st	Monroe st	North	6	50				50
Twentieth av NE	Jackson st	Polk st	Both	6	250	348			598
Twenty second av NE	Jackson st	Buchanan st	Both	6	431	684			1,115

TABLE NO. 23.—*Continued.*

STREET.	From—	To—	Side.	Width in feet.	LENGTH. Artificial stone laid by owner. Lineal feet.	Artificial stone laid by city. Lineal feet.	Plank walk laid by owner. Lineal feet.	Plank walk laid by city. Lineal feet.	Total Feet.
NINTH WARD—	*Continued.*								
Twenty-third av NE.	Central av	Johnson st	Both	6	470	524			994
Twenty-fourth av NE.	Jackson st	Central av	South	6	97				97
Twenty-fifth av NE.	Pierce st	Johnson st	Both	6	284	834			1,118
Twenty-sixth av NE.	Monroe st	Taylor st	Both	6	1,789	1,908			3,697
Twenty-seventh av NE	Central av	Monroe st	Both	6		2,008			2,008
Twenty-eighth av NE	Polk st	Taylor st	North	6	190				190
Twenty-ninth av NE.	Polk st	Taylor st	North	6	136				136
Total					12,870	19,396			32,266
Cost.. Walk					$6,486.48	$9,698.00			$16,181.48
Cost.. Inspection					132.77	200 09			332.86
Cost.. Total					$6,619.25	$9,898.09			$16,517.34
TENTH WARD—									
Aldrich av	Thirty-third av N	Thirty-fourth av N.	Both	6				1,211	1,211
Colfax av	Fortieth av	Forty-second av	Both	6	1,190				1,190
Dupont av	Twenty-sixth av N	Twenty-seventh av N.	East	6	87				87
Emerson av. No	Thirty-second av	Thirty-third av	Both	6	90	1,451			1,541
Fremont av	Thirtieth av	Thirty-second av	East	6	90	470			560
Penn av	Thirty-first av	Thirty-second av	North	6		40			40
Knox av	Thirtieth av	Thirty-seventh av	Both	6				2,042	2,042
Logan av	Thirtieth av	Thirty-second av	Both	6			245	954	1,199
Oliver av	Twenty-sixth av N	Twenty-seventh av N.	Both	6				1,219	1,219
Twenty-sixth av. N.	Washington av	Third st	North	6	81	341			422
Thirtieth av. N	Logan av	Morgan av	Both	6				264	264
Washington av	Thirtieth av	Thirty-second av	West	6		386			386
Washington av. N.	Twenty-ninth av	Thirtieth av	East	6	71				71
Total					1,609	2,688	245	5,690	10,232
Cost.. Walk					$804.50	$1,344 00	$66.15	$1,536.30	$3,750.95
Cost.. Inspection					52.35	87.46	7.98	185.07	332.86
Cost.. Total					$856.85	$1,431.46	$74.13	$1.721.37	$4,083.81

ELEVENTH WARD—									
Bloomington av	Franklin av	Twenty-fourth st	Both	6	58	708			766
Butler Place	Twenty-second av S.	Twenty-third av S	South	4	110				110
Butler Place	Twenty-third av S	Twenty-fifth av S	Both	6	252	357			619
Cedar av.	Franklin av	Twenty-fourth st	Both	8	606	200			806
Eighth st. S	Fifteenth av	Twenty-seventh av	Both	8	662	299			961
Eighth st. S	Twenty-seventh av S.	Twenty-eighth av S.	South	6		96			96
Eleventh av. S	Nineteenth st	Twenty-fourth st	Both	8	132	97			229
Eighteenth av. S	Franklin av	Twenty-fourth st	East	6	30	30			60
Franklin av	Tenth av S	Twenty-fifth av S	Both	12	877	495			1,372
Franklin av	Twenty-first av S	Twenty-fourth av S	North	8	358	55			413
Fourteenth av S	Ninth st	Eighteenth st	West	8	50				50
Fourteenth av S	Franklin av	Twenty-first st	West	6		115			115
Fifteenth av S	Eighth st	Franklin av	Both	8	240	103			343
Fifteenth st	Tenth av	Twelfth av	Both	6		118			118
Minnehaha av	Franklin av	Twenty-fourth st	Both	8		207			207
Ninth st S	Thirteenth av	Twenty-sixth av	Both	8	288	277			565
Ninth st S	Twentieth av	Twenty-first av	Both	6	254				254
Nineteenth av	Seventh st	Franklin av	Both	6	314	709			1,023
Riverside av	Eighth st	Ninth st	South	6		405			405
Riverside av	Twenty-fifth av S	Thirtieth av S	Both	8	362	583			945
Riverside av	Twenty-sixth av S	Twenty-seventh av S	North	15		37			37
Snelling av	Franklin av	Twenty-fourth st	Both	6	543	375			918
Seventh st S	Fifteenth av	Twenty-sixth av	South	8	161	186			347
Seventh st S	Twenty-sixth av	Twenty-seventh av	South	6	68				68
Sixteenth av S	Seventh st	Eighth st	Both	8	150	101			251
Sixteenth av S	Franklin av	Twenty-second st	Both	6		30			30
Seventeenth av S	Eighth st	Twenty-fourth st	Both	6	288	192			480
Tenth ave S	Eighth st	Twenty-first st	East	6	154	135			289
Twelfth av S	Eighth st	Ninth st	West	6		368			368
Twelfth av S	Twenty-second st	Twenty-fourth st	Both	4	261	88			349
Thirteenth av S	Eighth st	Eighteenth st	Both	8	385				385
Thirteenth av S	Franklin av	Twenty-first st	West	6	132				132
Twentieth av S	Seventh st	Ninth st	Both	6	508	302			810
Twentieth av S	Ninth st	Franklin av	West	8		221			221
Twenty-first av S	Seventh st	Franklin av	Both	6	124	274			398
Twenty-first av S	Fourteenth av S	Bloomington av	Both	6	143	59			202
Twenty-second av S	Ninth st	Twenty-second st	Both	8	331	156			487
Twenty-second av S	Cedar av	Twenty-seventh av S	Both	6	631	769			1,400
Twenty-second st	Eleventh av S	Twenty-seventh av S	Both	6	859	768			1,627
Twenty-second st	Twenty-first av S	Twenty-eighth av S	Both	8	261	614			875
Twenty-two and one-half av S	Franklin av	Twenty-second st	Both	2		807			807
Twenty-two and one-half av S	Franklin av	Twenty-fourth st	Both	6	173	917			1,090
Twenty-third av S	Seventh st	Twenty-second st	Both	8	400	102			502
Twenty-third av S	Franklin av	Twenty-fourth st	Both	6	351	570			921
Twenty-third st	Bloomington av	Fifteenth av	South	6	120				120

TABLE NO. 23.—*Continued.*

STREET.	From—	To—	Side.	Width in feet.	LENGTH. Artificial stone laid by owner. Lineal feet.	Artificial stone laid by city. Lineal feet.	Plank walk laid by owner. Lineal feet.	Plank walk laid by city. Lineal feet.	Total Feet.
ELEVENTH WARD—	*Continued.*								
Twenty-fourth av S	Seventh st	Ninth st	Both	8	232	109			341
Twenty-fourth st	Eleventh av S	Twenty-fourth av S	North	6	345	580			925
Twenty-fourth st	Cedar av	Twenty-seventh av S.	North	8	733	353			1,086
Twenty-fifth av S	Seventh st	Twenty-fourth st	Both	8	380				380
Twenty-fifth av S	Ninth st	Twenty-fourth st	Both	6	339	80			419
Twenty-sixth av S	Seventh st	Twenty-fourth st	Both	6	964	1,330			2,294
Twenty-sixth av S	Twenty-second st	Twenty-fourth st	Both	8	168	334			502
Twenty-seventh av S.	Seventh st	Twenty-second st	Both	8	84	1,105			1,189
Twenty-seventh av S.	Seventh st	Twenty-second st	Both	6	118	381			499
Twenty-eighth av S	Riverside av	Franklin av	Both	6	72	253			325
Twenty-ninth av S	Eighth st	Ninth st	East	6		380			380
Total					14,071	16,840			30,911
Cost. Walk					$8,354.38	$9,204.17			$17,558.55
Cost. Inspection					151.50	181.35			332.85
Cost. Total					$8,505.88	$9,385.52			$17,891.40
TWELFTH WARD—									
Lake st	Twenty-first av S	Thirty-first av S	Both	6	603	842			1,445
Minnehaha av	Twenty-fifth av S	Thirty-second st	Both	6	50	50			100
Twenty-third av S	Twenty-fourth st	Twenty-fifth st	Both	6	807	293			1,100
Twenty-fourth av S.	Twenty-fourth st	Twenty-fifth st	Both	6	677	1,238			1 915
Twenty-fourth st.	Twenty-fourth av S	Twenty-eighth av S	South	6	121	294			415
Twenty-fifth av S	Twenty-fifth st	Twenty-sixth st	East	6		206			206
Twenty-fifth av S	Minnehaha av	Thirtieth av	Both	6	325	335			660
Twenty-sixth av S	Twenty-fourth st	Lake st	Both	6	96	830			926
Twenty-sixth st	Twenty-sixth av S	Twenty-ninth av S	Both	6		107			107
Twenty-seventh av S.	Twenty-fifth st	Twenty-ninth st	Both	6	576	1,480			2,056
Twenty-eighth av S	Twenty-fifth st	Twenty-ninth st	Both	6	304	2,724			3,028
Twenty-eighth st	Twenty-sixth av S	Twenty-eighth av S	Both	6	198	330			528

Twenty-ninth av S	Twenty-fourth st	Twenty-sixth st	Both	6	248	544			792
Thirtieth av S	Twenty-fourth st	Lake st	Both	6	912	2,578			3,490
Thirty-second st	Hiawatha av	Minnehaha av	South	6		150			150
Total					4,917	12,001			16,918
Cost.. Walk					$2,458.50	$6,000.50			$8,459.00
Cost.. Inspection					96.75	236.13			332.88
Cost.. Totals					$2,555.25	$6,236.13			$8,791.88
THIRTEENTH WARD—									
Chicago av	Thirty-fifth st	Thirty-sixth st	West	10	55				55
Park av	Thirty-fifth st	Thirty-seventh st	East	6	221	929			1,150
Pleasant av	Thirty-fourth st	Thirty-sixth st	Both	6	96				96
Pillsbury av	Thirty-fourth st	Thirty-fifth st	North	6	42				42
Second av S	Thirty-sixth st	Thirty-seventh st	East	6	160				160
Second av S	Thirty-sixth st	Thirty-seventh st	East	6				450	450
Thirty-fifth st	Pillsbury av	Blaisdell av	South	6			168		168
Thirty-sixth st	Stevens av	Second av S	South	6				291	291
Thirty-seventh st	Fourth av S	Portland av	South	6				532	532
Thirty-seventh st	Columbus av	Portland av	North	6	252	255			507
Thirty-seventh st	Columbus av	Chicago av	North	6				272	272
Totals					826	1,184	168	1,545	3,723
Cost.. Walk					$432.33	$592.00	$45.36	$417.15	$1,486.84
Cost.. Inspection					73.84	105.85	15.02	138.16	322.87
Cost.. Total					$506.17	$697.85	$60.38	$555.21	1,819.71

TABLE NO. 24.
Summary of Table No 23.

WARDS.	ARTIFICIAL STONE.					
	LAID BY OWNER.			LAID BY CITY.		
	Lineal feet.	Cost.		Lineal feet.	Cost.	
		Walk.	Inspection.		Walk.	Inspection.
First	18,891	$4,414.42	$181.60	7,404	$3,702.00	$151.23
Second	6,617	3,308 50	201.19	4,330	2,165.00	131.64
Third	15,633	7,959.70	167.81	15,372	6,661.40	165.02
Fourth	12,496	7,034.03	147.27	15,411	6,886.74	181.64
Fifth	8,993	4,147.28	150.89	10,843	5,606.17	181.95
Sixth	14,997	10,377.22	181.38	12,523	8,877.02	151.46
Seventh	9,477	4,823.14	136.28	13,666	6,978.02	196.56
Eighth	16,820	8,547.68	117.61	30,773	15,621.22	215.23
Ninth	12,870	6,486.48	132.77	19,396	9,698.00	200.09
Tenth	1,609	804.50	52.35	2,688	1,344.00	87.46
Eleventh	14,071	8,354 38	151.50	16,840	9,204.17	181.35
Twelfth	4,917	2,458 50	96.75	12,001	6,000.00	236,13
Thirteenth	826	432.33	73.84	1,184	592.00	105.85
Totals	128.217	$69,148.16	$1,791.24	162,431	$63,335.74	$2,185.61
Total miles	24.28			30.76		

WARDS.	PLANK.					
	LAID BY OWNER.			LAID BY CITY.		
	Lineal feet.	Cost.		Lineal feet.	Cost.	
		Walk.	Inspection.		Walk.	Inspection.
First						
Second						
Third						
Fourth				331	$89.37	$3.92
Fifth						
Sixth						
Seventh						
Eighth						
Ninth						
Tenth	245	$66.15	$7.98	5,690	1,536.30	185.07
Eleventh						
Twelfth						
Thirteenth	168	45.36	15.02	1,545	417.15	138.16
Totals	413	$111.51	$23.00	7,566	$2,042.82	$327.15
Total miles	.08			1.43		

WARDS.	TOTAL.			
	Lineal feet.	Cost.		Total.
		Walk.	Inspection.	
First	16,295	$8,116.42	$332.83	$8,449.25
Second	10,947	5,473.50	332.83	5,806.33
Third	31,005	14,621.10	332.83	14,953.93
Fourth	28,238	14,010.14	332.83	14,342.97
Fifth	19,836	9,753 45	332.84	10,086.29
Sixth	27,520	19,254.24	332.84	19,587.08
Seventh	23,143	11,801.16	332.84	12,134.00
Eighth	47,593	24,168.90	332.84	24,501.74
Ninth	32,266	16.084.48	332.86	16,417.34
Tenth	10,232	3,750.95	332.86	4,083.81
Eleventh	30,911	17,558.55	332.85	17,891.40
Twelfth	16,918	8,458.50	332.88	8,791.38
Thirteenth	3,723	1,486.84	332.87	1,819.71
Totals	298,627	$154,538.23	$4,327.00	$158,865.23

RATE OF ASSESSMENT PER LINEAL FOOT.		
Width in feet.	KIND.	Rate.
3	Plank	$ .11
4	Plank	.19
6	Plank	.27
8	Plank	.32
12	Plank	.46
4	Artific'l st'ne	.34
6	Artific'l st'ne	.50
8	Artific'l st'ne	.66
9	Artific'l st'ne	.74
12	Artific'l st'ne	.98
15	Artific'l st'ne	1.22
18	Artific'l st'ne	1.46
14.5	Artific'l st'ne	1.18
17.5	Artific'l st'ne	1.42
11.5	Artific'l st'ne	.94

Total stone walk	55.04 miles.
Total plank walk	1.51 miles.
Total	56.55 miles.

TABLE NO. 25.

Sidewalks Ordered for the Year 1901.

STREET.	From—	To—	Side.	Width in feet.	No. of descriptions.	Length Assessed.		Amount of Assessment.	
						Artificial Stone. Feet. 10ths	Plank. Feet.	Artificial stone.	Plank.
1ST WARD—									
Broadway st.	Main st	3rd st	Both	6	2	532.7	. . . . .	$287.66	. . . . . .
California st.	15th av NE	17th av NE	Both	6	29	1,503.7	. . . . .	812.00	. . . . . .
8th av NE.	Ramsey st.	Marshall st	Sonth	6	2	276.1	. . . . .	149.09	. . . . . .
11th av NE.	Main st	Marshall st	North	6	4	355.5	. . . . .	191.97	. . . . . .
4th st NE	9th av.	19th av	Both	6	58	3,357.9	. . . . .	1,813.27	. . . . . .
5th av NE	Marshall st	Main st	South	6	1	168.0	. . . . .	90.72	. . . . . .
14th av NE	Marshall st	5th st	Both	6	43	3,115.5	. . . . .	1,682.37	. . . . . .
15th av NE	California st.	4th st	Both	6	10	883.7	. . . . .	477.21	. . . . . .
Grand st.	18th av NE	25th av NE	Both	6	47	2,683.8	. . . . .	1,449.26	. . . . . .
Island av	Bridge st.	Eastman av.	West	6	1	95.0	. . . . .	221.30	. . . . . .
Main st	17th av NE	18th av NE	West	6	1	50.0	. . . . .	27.00	. . . . . .
Marshall st	8th av NE.	Railroad	West	6	19	777.9	. . . . .	420.06	. . . . . .
Marshall st	22nd av.	26th av	East.	6	66	3,346.7	. . . . .	1,807.21	. . . . . .
Marshall st	26th av NE	29th av NE	West	6	11	1,766.9	. . . . .	954.11	. . . . . .
9th av NE.	University av	4th st	South	6	1	107.0	. . . . .	57.78	. . . . . .
19th av NE	2nd st.	4th st	Both	6	13	1,726.2	. . . . .	932.16	. . . . . .
2nd st NE.	Broadway st.	25th av NE	Both	6	138	7,818.0	. . . . .	4,221.73	. . . . . .
6th av NE.	Main st	Marshall st	South	6	1	173.0	. . . . .	93.42	. . . . . .
7th av NE.	Marshall st	Ramsey st.	North	6	6	331.3	. . . . .	178.90	. . . . . .
16th av NE	Grand st.	3rd st	Both	6	7	886.3	. . . . .	488.63	. . . . . .
17th av NE	2nd st.	University av	Both	6	2	247.0	. . . . .	133.38	. . . . . .
3rd st NE	Broadway st.	18th av	Both	6	42	2,909.5	. . . . .	1,571.13	. . . . . .
12th av NE	E. line blk. 1, Orth's.	4th st	Both	6	30	1,930.3	. . . . .	1,024.44	. . . . . .
13th av NE	Ramsey st.	5th st	Both	6	24	1,454.4	. . . . .	785.40	. . . . . .
20th av NE	2nd st.	University av	North	6	6	349.0	. . . . .	188.46	. . . . . .
22nd av NE.	Marshall st	University av	Both	6	33	3,188.8	. . . . .	1,722.09	. . . . . .
23rd av NE.	2nd st.	University av	South	6	3	495.6	. . . . .	267.60	. . . . . .
25th av NE	Marshall st	5th st	Both	6	20	2,509.2	. . . . .	1,355.00	. . . . . .
Univ. av NE	6th av.	25th av	Both	6	86	4.444.0	. . . . .	2,399.90	. . . . . .
Total	. . . .	. . . .	. . . . .	. .	706	47,483.0	. . . . .	$25,803.25	. . . . . .
2D WARD—									
Arthur av.	Univ. av S line	Prospect Pk. 1st Division	Both	6	17	319.9	. . . . .	712.73	. . . . . .
Beacon st	Pleasant st	Ontario st.	Both	6	9	1,269.8	. . . . .	685.69	. . . . . .
Bedford av	Hamlin av	Sharon av.	West	6	5	196.0	. . . . .	105.84	. . . . . .
Cecil st	Hamlin av	Sharon av.	West	6	12	422.5	. . . . .	228.15	. . . . . .
Church st.	Beacon st	Delaware st.	Both	6	14	955.0	. . . . .	515.70	. . . . . .
Como av.	17th av SE	19th av SE	North	6	4	430.7	. . . . .	232.58	. . . . . .
Dartmouth av.	Lennox st.	Boulevard.	South	6	11	1,009.7	. . . . .	545.24	. . . . . .
Delaware st.	Walnut st.	Oak st.	South	6	5	342.0	. . . . .	184.68	. . . . . .
8th st SE	3rd av.	15th av	Both	6	14	1,046.6	. . . . .	565.17	. . . . . .
11th av SE	7th st	8th st	South	6	1	13.7	. . . . .	7.40	. . . . . .
Fulton st	Oak st	Ontario st.	South	6	2	322,5	. . . . .	174.15	. . . . . .
4th st SE	5th av.	6th av.	East.	6	2	146.0	. . . . .	78.84	. . . . . .
5th st SE	15th av	16th av	North	6	1	130.0	. . . . .	70.20	. . . . . .
15th av SE	University av	7th st	Both	6	4	435.0	. . . . .	234.90	. . . . . .
Hamlin av	Bedford av	Cecil st	North	6	14	462.9	. . . . .	249.93	. . . . . .
Howard st.	Washington av	Delaware st.	East.	6	4	358 0	. . . . .	193.32	. . . . . .
Lennox st.	Dartmouth st.	Frank.av bdg	Both	6	51	1,667.0	. . . . .	900.18	. . . . . .
Malcom av	Orlin av.	Arthur av.	East.	6	15	914.2	. . . . .	493.67	. . . . . .
9th st SE	3rd av.	5th av.	Both	6	8	317.7	. . . . .	171.56	. . . . . .
19th av SE	University av	4th st	West	6	4	295.5	. . . . .	159.57	. . . . . .
Oak st.	Fulton st	Parkway	East.	6	15	444.7	. . . . .	240.13	. . . . . .
Ontario st.	Wash. av SE	Boulevard.	West	6	39	1,587.8	. . . . .	857.42	. . . . . .
Orlin av	Arthur av.	Malcom av	North	6	2	100.0	. . . . .	54.00	. . . . . .
Sidney place	Arthur av.	Malcom av	South	6	1	60.2	. . . . .	$32.51	. . . . . .
State st	Beacon st.	Wash. av SE	West	6	2	140.0	. . . . .	75.60	. . . . . .
6th av SE.	7th st	8th st.	East	6	2	170.0	. . . . .	91.80	. . . . . .
6th st SE	16th av.	17th av	North	6	2	97.0	. . . . .	52.38	. . . . . .
7th av SE.	4th st.	Univ. av	North	6	2	370.0	. . . . .	199.80	. . . . . .
7th st SE	11th av.	18th av	Both	6	17	726.4	. . . . .	392.26	. . . . . .
16th av SE	Univ. av.	8th st.	Both	6	11	536.0	. . . . .	289.44	. . . . . .
12th av SE	7th st.	8th st.	West	6	3	243.5	. . . . .	131.49	. . . . . .
13th av SE	4th st.	Univ. av	South	6	13	358.0	. . . . .	193.32	. . . . . .
13th av SE	7th st.	8th st.	West	6	2	96.4	. . . . .	52.06	. . . . . .
24th av SE	Como av	Talmage	East	6	15	605.5	. . . . .	326.97	. . . . . .

TABLE NO. 25—*Continued.*

STREET.	From—	To—	Side.	Width in feet.	No. of descriptions.	Length Assessed.		Amount of Assessment	
						Artificial Stone. Feet. 10ths	Plank. Feet.	Artificial Stone.	Plank.
2D WARD—	*Continued.*								
Union st	Beacon st.	Delaware st.	West	6	5	346.0	. . . . .	186.84	. . . . . .
Univ. av SE.	14th av	Mary st	North.	6	26	1,666.8	. . . . .	900.07	. . . . . .
Walnut st.	Delaware st.	Essex st.	West	6	1	83.6	. . . . .	44.82	. . . . . .
Total	. . . .	. . . .	. . . . .	. .	355	18,686.0	. . . . .	$10,630.41	. . . . . .
3D WARD—									
Aldrich av	25th av N.	26th av N.	East	6	3	158.5	. . . . .	85.59	. . . . . .
Aldrich av	6th av N	18th av	Both	6	26	1,307.1	. . . . .	705.83	. . . . . .
Bradford av	7th av N	8th av N	Both	6	3	268.9	. . . . .	145.20	. . . . . .
Bryant av.	6th av N	26th av N.	Both	6	73	3,058.5	. . . . .	2,651.59	. . . . . .
Crystal Lk. av	James av	Penn av.	North.	6	13	595.0	. . . . .	321.30	. . . . . .
Dupont av	11th av N.	12th av N.	Both	6	11	476.5	. . . . .	257.31	. . . . . .
Dupont av	24th av	26th av	Both	6	3	158.5	. . . . .	85.59	. . . . . .
Elwood av	Humboldt av	Irving av	North.	6	7	411.9	. . . . .	222.42	. . . . . .
Emerson av.	8th av.	Plymouth av	Both	6	49	2,252.4	. . . . .	1,216.29	. . . . . .
Emerson av.	22d av	26th av	Both	6	55	2,517.4	. . . . .	1,359.39	. . . . . .
8th av N	5th av.	Elwood av	Both	6	22	1,576.2	. . . . .	851 15	. . . . . .
11th av N.	Lyndale av	Girard av.	Both.	6	25	1,972.9	. . . . .	1,065.37	. . . . . .
18th av N.	1st st	Fremont av	Both.	6	36	3,639	. . . . .	1,965.05	. . . . . .
Fremont av.	8th av.	22d av.	Both.	6	27	1,397.3	. . . . .	754.59	. . . . . .
Fremont av.	22d av	26th av	Both.	6	26	1,423.9	. . . . .	768.90	. . . . . .
4th st N.	20th av	26th av	Both.	6	40	1,919	. . . . .	1,036.26	. . . . . .
4th st N.	15th av	16th av	South.	12	1	48	. . . . .	102.80	. . . . . .
4th st N.	3d av	Bdg. appr'ch	Both.	6	2	90	. . . . .	48.60	. . . . . .
4th st N.	9th av.	10½ av	Both.	8	18	805.5	. . . . .	579.96	. . . . . .
4th st N.	11th av	20th av	Both.	6	26	1,725.3	. . . . .	931.66	. . . . . .
5th st N.	6th av.	7th av.	South.	8	1	50.1	. . . . .	182.00	. . . . . .
5th st N.	6th av.	11th av	Both.	8	19	914.2	. . . . .	658.21	. . . . . .
5th st N.	5th av.	20th av	Both.	6	39	1,871.3	. . . . .	1,010.50	. . . . . .
14th av N.	3d st.	Irviug av	Both.	6	22	2,399.1	. . . . .	1,295.52	. . . . . .
15th av N.	2d st.	Fremont av.	Both.	6	30	3,602.5	. . . . .	1,955.37	. . . . . .
Girard av N.	8th av.	14th av	Both.	6	42	1,990	. . . . .	1,074.60	. . . . . .
Hillside av	Irving av	Illion av.	Both.	6	32	1,491.7	. . . . .	805.51	. . . . . .
Hoag av.	6th av N.	8th av N.	West	6	4	469.5	. . . . .	253.53	. . . . . .
Irving av	Elwood av	Hillside av.	Both.	6	17	985.4	. . . . .	532.11	. . . . . .
James av	Crystal L'ke av	Hillside av.	Both.	6	39	2,133.2	. . . . .	1,161.22	. . . . . .
Jewett Place	6th av N.	8th av N.	West	4	27	752.5	. . . . .	270.90	. . . . . .
Knox av.	10th av N	Plymouth av	Both.	6	25	1,032.8	. . . . .	557.71	. . . . . .
Logan av	10th av N	Willow av.	Both.	6	28	1,457.7	. . . . .	787.16	. . . . . .
Lyndale Place.	6th av N.	8th av N.	West	4	14	421	. . . . .	151.56	. . . . . .
9th av N.	3d st.	4th st	East	6	1	332	. . . . .	179.28	. . . . . .
19th av N.	2d st.	Wash. av	North.	6	2	55	. . . . .	29.70	. . . . . .
Oak Lake av.	6th av.	10th av	Both.	6	12	1,120	. . . . .	604.80	. . . . . .
Oliver av	Plymouth av.	16th av	West	6	9	720.2	. . . . .	388.91	. . . . . .
Penn av N	8th av.	Crystal Lake av.	West	6	16	659.6	. . . . .	356.18	. . . . . .
Plymouth av.	Fremont av.	Girard av	South.	6	14	314.8	. . . . .	169.99	. . . . . .
Sheridan av.	21st av	23d av	Both	6	26	1,142.1	. . . . .	616.73	. . . . . .
2d st N.	15th av	20th av	Both	8	42	2,168.0	. . . . .	1,577.76	. . . . . .
2d st N.	20th av	26th av	Both	8	44	2,154.5	. . . . .	1,551.24	. . . . . .
6th av N	Lyndale av	Humboldt av	North.	6	32	906.2	. . . . .	489.35	. . . . . .
6th st N	12th av	26th av	Both	6	35	1,894.5	. . . . .	1,023.06	. . . . . .
7th av N	3d st	4th st	Both	6	5	480.0	. . . . .	259.20	. . . . . .
7th av N	5th st	Lyndale av.	Both	6	27	1,867.0	. . . . .	1,008.18	. . . . . .
16th av N	1st st	Fremont av.	Both	6	14	1,560.5	. . . . .	842.67	. . . . . .
17th av N.	1st st	Fremont av.	Both	6	18	2,334.6	. . . . .	1,260.69	. . . . . .
3d st N.	4th av.	21st av	Both	8	32	1,731 0	. . . . .	1,256.32	. . . . . .
3d st N	5th av.	20th av	Both	6	11	1,454.6	. . . . .	785.48	. . . . . .
3d st N	21st av	26th av	Both	6	68	3,595.2	. . . . .	1,941.41	. . . . . .
10th av N.	3d st	Logau av	Both	6	24	1,436.9	. . . . .	775.92	. . . . . .
10½ av N	4th st	5th st	Both	6	3	401.0	. . . . .	216.54	. . . . . .
12th av N.	3d st	Logan av	Both	6	21	2,282.7	. . . . .	1,232·65	. . . . . .
20th av N.	Bridge	3d st	Both	8	15	800.5	. . . . .	576.36	. . . . . .
20th av N.	Dupont av.	Fremont av.	Both	6	2	225.0	. . . . .	121.50	. . . . . .
21st av N	1st st	Emerson av.	Both	6	25	2,292.0	. . . . .	1,237.68	. . . . . .
22d av N	1st st	Dupont av	Both	6	16	1,801.0	. . . . .	972.54	. . . . . .
22d av N	Irving av	22d av	West	6	1	87.0	. . . . .	46.98	. . . . . .
23d av N	2d st	Emerson av.	Both	6	20	1,352.5	. . . . .	730.35	. . . . . .
24th av N.	2d st	Fremont av.	Both	6	27	2,120.8	. . . . .	1,145.23	. . . . . .
25th av N.	3d st	Fremont av.	Both	6	29	2,106.9	. . . . .	1,137.73	. . . . . .
26th av N.	3d st	Fremont av.	South.	6	17	1,655.0	. . . . .	893.70	. . . . . .

TABLE No. 25—*Continued.*

STREET.	From—	To—	Side.	Width in feet.	No. of descriptions.	Length Assessed. Artificial Stone. Feet. 10ths	Length Assessed. Plank. Feet.	Amount of Assessment. Artificial stone.	Amount of Assessment. Plank.
3D WARD—	*Continued.*								
Wash'gt'n av N	8th av.	9th av.	South.	18	1	53.5	.....	86.67	......
Wash. av N	15th av	16th av	East	10	1	27.5	.....	24.75	......
Wash. av N	22d av.	23d av.	East	12	1	68	.....	69.36	......
Total	....	......	.....	..	1416	86,572.9	.....	$49,459.66	......
4TH WARD—									
Aldrich av.	5th av.	6th av.	West	6	1	74.5	.....	40.23	......
Bryant av.	Lincoln av	Summit av	Both	6	12	624.0	.....	336.96	......
Colfax av	2d av	5th av.	Both	6	15	800.0	.....	432.00	......
Colfax av	Lincoln av	Douglas av	West	6	9	480.0	.....	259.20	......
Colfax av	Lincoln av	Franklin ave	Both	6	19	1,060.0	.....	572.40	......
Dell Place.	Forest av	Groveland av	East	6	4	200.3	.....	108.16	......
Douglas av	Bryant av.	James av	North.	6	22	2,068.2	.....	1,116.83	......
Dupont av.	Lincoln av	Franklin av.	Both	6	14	785.0	.....	423.90	......
Emerson av.	Douglas av	Summit av	West	6	3	162.0	.....	87.48	......
Emerson av.	Lincoln av.	Franklin av	Both	6	8	418.0	.....	225.72	......
Erie av	Hennepin av	Aldrich av.	North.	6	4	600.0	.....	324.00	......
8th st N.	Hennepin av	1st av N.	West	6	1	165.0	.....	289.10	......
Franklin av.	Aldrich av.	Pillsbury av.	North.	8	2	427.5	.....	307.80	......
Forest av	Lyndale av	Groveland av	Both	6	16	864.6	.....	466.86	......
Fremont av.	Mt. Curve av	Douglas av	Both	6	6	416.7	.....	225.02	......
4th av N	Newton ave.	Penn av.	Both	6	6	413.7	.....	223.40	......
4th st N.	1st av	2d av	East	16	3	213.0	.....	306.72	......
5th av N	7th st	Royalston av	South.	6	2	466.6	.....	251.96	......
5th av N	Knox av.	Logan av	North.	6	5	134.8	.....	72.79	......
Groveland av	Lyndale av	Ridg'wo'd av	Both	6	17	1,655.5	.....	893.97	......
Groveland av	Hennepin av	Mt. Curve av	South.	6	12	534.9	.....	288.84	......
Girard av	2d st	Western av	East	6	1	126.0	.....	68.04	......
Girard av	Douglas av	Summit av	West	6	3	162.0	.....	87.48	......
Hennepin av	Eighth st.	Ninth st.	North.	18	1	75.0	.....	321.50	......
Hennepin av	Lyndale av	Franklin av	Both	6	10	763.4	.....	412.24	......
Humboldt av	Fourth av.	Fifth av.	West	6	10	341.7	.....	184.51	......
Humboldt av	Mt. Curve av.	Summit av	Both	6	15	809 5	.....	437.13	......
Humboldt av	First av N.	Western av	East.	6	22	906.2	.....	489.34	......
Irving av	Mt. Curve av	Douglas av	West	6	10	505.0	.....	272.70	......
James av	Mt. Curve av	Douglas av	West	6	10	517.0	.....	279.18	......
Knox av.	Fifth av.	Sixth av.	East.	6	9	393.5	.....	212.49	......
Knox av.	Mt. Curve av	Douglas av	Both	6	20	1,034.0	.....	558 36	......
Lakeside av.	Lyndale av	Border av.	South.	6	3	170.0	.....	91.80	......
Linden av.	Fifteenth st	16th st	North.	6	2	102.5	.....	55.35	......
Lincoln av	Aldrich av	Hennepin av	South.	6	1	115.9	.....	62.58	......
Lincoln av	Hennepin av	Dupont av	North.	6	5	677.6	.....	365.90	......
Lincoln av	Fremont av.	Girard av.	North.	6	2	416.0	.....	224.64	......
Lyndale av	R. R. Bdg.	Western av	Both	6	12	1,011.5	.....	546.21	......
Lyndale av	Hennepin av	Linden av	East.	6	4	263.3	.....	142.17	......
Lyndale av	Summit av	Franklin av	West	8	17	768.5	.....	553.32	......
Mt. Curve av	Bryant av.	Dupont av	North.	6	12	607.4	.....	327.99	......
Mt. Curve av	Humboldt av	Knox av	South.	6	4	562.0	.....	303.48	......
Mt. Curve av	Waverly Place	Kenwood Bl	North.	6	2	200.0	.....	108.00	......
Morgan av	Kenwood Boul	Douglas av	West	6	1	50.0	.....	27.00	......
Newton av	Fourth av.	Fifth av.	East.	6	7	340.9	.....	184.08	......
Nicollet av	Fourteenth av	Fifteenth st.	West	8	1	22.0	.....	15.84	......
Oliver av	Cedar Lake Rd 5, Os	to L. 17, blk wald's.	East.	6	11	.....	582.2	......	157.19
Penn av.	Fifth av.	Sixth av	East.	6	9	515.4	.....	278.31	......
Pillsbury av.	Groveland av.	Franklin av	Both	6	5	595.6	.....	321.61	......
Summit av	Hennepin av	Lyndale av	Both	6	3	370.2	.....	199.91	......
Summit av	Dupont av	Humboldt av	North	6	6	852.0	.....	$460.08	......
2d av N	Aldrich av	Colfax av	North	6	5	492.5	.....	265.95	......
6th av N	Humboldt av	Knox av	South	6	31	838.3	.....	452.67	......
6th av N	Bryant av.	Colfax av	South	6	1	134.0	.....	72.36	......
6th av N	Knox av	Penn av.	South	6	26	910.9	.....	491.88	......
*6th st N.	1st av.	2d av	.....	..	..	.....	.....	......	......
7th st S.	Nicollet av	1st av S.	South	15	3	188.0	.....	253.80	......
7th st N.	R. R. Bridge	5th av	South	6	1	600.0	.....	324.00	......
17th st	Erie av	Laurel av	West	6	10	734.5	.....	396.63	......
3d av N.	Lyndale av	Aldrich av	South	3	3	341.5	.....	92.20	......
3d av N.	Morgan av to	E. line Lot 3, Blk. 2, Berquist Sub	South	6	8	318.7	.....	172.08	......

TABLE NO. 25.—*Continued.*

STREET.	From—	To—	Side.	Width in feet.	No. of descriptions.	Length Assessed.		Amount of Assessment.	
						Artificial Stone. Feet. 10ths	Plank. Feet.	Artificial stone.	Plank.
4TH WARD—	*Continued.*								
Western av	Gramarcy av	Morgan av	South	6	8	345.5	.....	187.65	.....
Western av	Queen av	Russell av.	North	6	4	191.7	.....	103.51	.....
Western av	Sheridan av	Upton av	South	6	8	.....	474.2	.....	128.04
Total					507	30,934.0	1,056.4	$17,657.31	$285.23
5TH WARD—									
Clinton av	Grant st	24th st	Both	6	11	557.7	.....	$304.93	.....
Chicago av	9th st	14th st	East	6	3	180.2	.....	97.31	.....
Columbus av	Franklin av	22d st	East	6	1	174.0	.....	93.96	.....
Elliot	9th st	21st st	Both	6	4	558.0	.....	299.27	.....
8th av S	3d st	10tn st	Both	8	3	226.1	.....	171.75	.....
8th st S	5th av.	6th av.	North	15	1	9.0	.....	21.60	.....
8th st S	8th av	9th av	South	8	2	66.0	.....	47.52	.....
11th st S	4th av	5th av.	South	8	1	67.0	.....	48.24	.....
18th st S	Nicollet av	Park av.	Both	6	10	791.0	.....	427.14	.....
Franklin av	Nicollet av	Chicago av	Both	6	19	766.5	.....	413.91	.....
Franklin av.	Chicago av	Elliot av.	North.	8	3	159.5	.....	114.84	.....
1st av S	High st	1st st	East	15	1	16.0	.....	38.40	.....
1st av S	12th st	13th st	East	8	1	171.0	.....	92.34	.....
1st av S	Grant st.	22d st.	Both	6	15	1,879.2	.....	1,014.77	.....
1st av S	2d av	3d av	North	15	1	118.0	.....	159.30	.....
4th av S.	5th st	6th st	West	8	1	9.0	.....	11.52	.....
4th av S.	Grant st.	24th st	Both	6	23	1,017.0	.....	552.87	.....
4th av S.	Franklin av.	22d st.	West	9	1	20.0	.....	142.40	.....
4th st S	6th av.	7th av.	North	8	1	14.0	.....	17.92	.....
4th st S	9th av.	10th av	South.	6	..	9.0	.....	8.64	.....
5th av S.	Grant st.	24th st	Both	6	18	763.1	.....	429.35	.....
5th st S	9th av.	10th av	South.	8	2	77.0	.....	55.44	.....
14th st S	Nicollet av	Chicago av	Both	6	10	962.2	.....	519.58	.....
15th st S	Nicollet av	Chicago av	Both	6	7	425.0	.....	229.49	.....
Grant st.	3d av S	Clinton av	North	6	1	9.0	.....	8.64	.....
Nicollet av	17th st	Franklin av.	East	8	8	420.0	.....	302.40	.....
9th av S.	4th st	7th st	West	8	5	456.0	.....	343.44	.....
19th st S	1st av S	Portland av.	Both	6	4	529.0	.....	285.66	.....
Oakland av	Franklin av	24th st	Both	6	8	419.0	.....	269.46	.....
Stevens av	16th st	19th st	Both	6	14	723.5	.....	390.69	.....
2d av S	7th st	8th st	West	8	1	18.0	.....	33.12	.....
2d av S	16th st	22d st	Both	6	7	288.9	.....	181.93	.....
6th av S.	1st st	4th st	West.	15	2	115.0	.....	184.05	.....
6th av S.	6th st	7th st	West	14	1	10.0	.....	22.40	.....
6th st S	3d av	10th av	Both	8	5	134.0	.....	166.88	.....
6th st S	6th av.	7th av.	South.	14	1	78.0	.....	98.28	.....
7th av S.	3d st	4th st	East	15	1	15.0	.....	36.00	.....
*7th av S	9th st	10th st	.....	..	..	.....	.....	.....	.....
7th st S.	2d av	3d av	South.	8	1	139.0	.....	100.08	.....
16th st	Nicollet av	3d av	Both	6	4	407.2	.....	219.88	.....
17th st	1st av S.	Chicago av	Both	6	9	992.5	.....	547.47	.....
3d av S	1st st	7th st	Both	15	4	49.0	.....	113.65	.....
3d av S	7th st.	8th st	West	14½	1	29.0	.....	67.28	.....
3d av S	Grant st	14th st	West	6	1	56.0	.....	30.24	.....
10th av S	4th st.	5th st	West	8	1	59.0	.....	42.48	.....
10th av S	15th st	17th st	West	6	1	107.5	.....	58.05	.....
12th st S	3d av	Clinton av	South.	15	1	10.0	.....	24.00	.....
21st st S	Elliot av	10th av S	North.	6	1	106.0	.....	59.04	.....
22d st S.	Oakland av.	Elliot av	Both	6	6	988.8	.....	542.52	.....
24th st S	Chicago av	10th av S	North.	6	2	561,6	.....	303.80	.....
Total					229	15,756.5	.....	$9,743.93	.....
6TH WARD—									
Cedar av	2d st	Wash. av	East.	4	2	128.3	.....	46.18	.....
11th av S	2d st	7th st	East.	8	5	692.0	.....	498.24	.....
1st st S	13th av	20th av	Both	8	19	890.6	.....	641.23	.....
4th st S	10th av	22d av	Both	8	23	1,258.3	.....	905.96	.....
4th st S	19th av	20th av	South.	8	1	66.0	.....	245.52	.....
5th st S	10th av	22d av	Both	8	61	2,951.5	.....	2,125.08	.....
14th av S	1st st	7th st.	Both	8	23	2,139.3	.....	1,540.30	.....
15th av S	Wash. av	7th st.	Both	8	19	1,486.5	.....	1,070.28	.....
cust st	22d av	Bjornsen av.	South.	6	5	174.9	.....	94.44	.....
19th av S	1st st	2d st	Both	6	8	416.9	.....	225.11	.....
19th av S	Bluff st	6th st	Both	8	25	1,697.8	.....	1,222.41	.....

TABLE NO. 25.—*Continued.*

STREET.	From—	To—	Side.	Width in feet.	No. of descriptions.	Length Assessed.		Amount of Assessment.	
						Artificial Stone. Feet. 10ths	Plank. Feet.	Artificial stone.	Plank.
6TH WARD—	*Continued.*								
19th av S . . .	4th st.	5th st	East. .	8	1	49.8	. . . . .	187.86	. . . . . .
Riverside av .	19th av. . . .	6th st	South.	8	4	385.0	. . . . .	277.21	. . . . . .
Riverside av. .	21st av	23d av . . .	Both. .	15	3	77.9	. . . . .	105 17	. . . . . .
2d st S. . . .	21st av. . . .	Wash. av . .	South .	6	4	301.2	. . . . .	162.64	. . . . . .
2d st S. . . .	10th av	20th av . . .	Both. .	8	46	2,809.1	. . . . .	2,022.55	. . . . . .
6th st S	11th av	12th av . . .	North .	6	2	100.0	. . . . .	59.40	. . . . . .
6th st S	12th av	Riverside av.	Both. .	8	48	2,498.2	. . . . .	1,798.70	. . . . . .
6th st S	25th av	26th av . . .	South .	6	1	47.4	. . . . .	25.60	. . . . . .
7th st S	14th av	26th av . . .	North .	8	4	371.5	. . . . .	267.48	. . . . . .
16th av S . . .	4th st	7th st	Both. .	8	9	814.0	. . . . .	586.08	. . . . . .
17th av S . . .	6th st	7th st	West .	8	3	350.0	. . . . .	252.00	. . . . . .
3d st S.	11th av	21st av . . .	Both. .	8	17	820.0	. . . . .	590.40	. . . . . .
10th av S . . .	3d st.	4th st	East. .	8	1	95.5	. . . . .	68.76	. . . . . .
12th av S . . .	1st st	5th st	Both. .	8	9	931.6	. . . . .	670.75	. . . . . .
12th av S . . .	2d st.	Wash. av . .	East. .	8	1	165.0	. . . . .	383.80	. . . . . .
13th av S . . .	1st st	7th st	Both. .	8	16	1,657.5	. . . . .	1,193.40	. . . . . .
20th av S . . .	Bluff st	7th st	Both. .	8	38	2,532.4	. . . . .	1,823.29	. . . . . .
21st av S . . .	R. R.	7th st	West .	8	16	1,076.0	. . . . .	774.72	. . . . . .
22d av S . . .	Wash. av . . .	3d st.	Both. .	6	20	1,151.0	. . . . .	621.54	. . . . . .
22d av S . . .	5th st	7th st	West .	8	3	248.0	. . . . .	178.56	. . . . . .
23d av S . . .	Riverside av .	6th st	Both. .	8	7	514.8	. . . . .	370.65	. . . . . .
24th av S . . .	6th st	7th st	West .	8	1	165.0	. . . . .	123.12	. . . . . .
25th av S . . .	6th st	7th st	Both. .	8	3	224.0	. . . . .	161.28	. . . . . .
26th av S . . .	6th st	7th st	Both. .	8	4	426.0	. . . . .	306.72	. . . . . .
27th av S . . .	6th st	7th st	West .	8	4	183.3	. . . . .	131.98	. . . . . .
Wash. av S . .	12th av	13th av S . .	North.	8	3	212.0	. . . . .	343.44	. . . . . .
Wash. av S . .	Cedar av . . .	21st av S . .	Both. .	8	30	1,562.5	. . . . .	1,125.00	. . . . . .
Total . . .	. . . .	. . . .	. . . . .	. .	494	31,670.8	. . . . .	$23,226.85	. . . . . .
7TH WARD —									
Blo'mingt'n av	25th st	35th st . . .	Both .	6	23	1,504.3	. . . . .	812.30	. . . . . .
Cedar av . . .	24th st	R. R.	Both .	6	5	384.2	. . . . .	206.47	. . . . . .
Chicago av . .	31st st	37th st . . .	East. .	6	47	2,599.8	. . . . .	1,403.88	. . . . . .
Elliot av . . .	Lake st	36th st . . .	Both .	6	128	5,443,1	. . . . .	2,939.27	. . . . . .
11th av S . . .	28th st	29th st . . .	Both .	6	28	1,056.0	. . . . .	570.24	. . . . . .
18th av S . . .	25th st	31st st . . .	Both .	6	51	2,242.9	. . . . .	1,211.16	. . . . . .
15th av S . . .	24th st	31st st . . .	Both .	6	81	3,686.7	. . . . .	1,990.94	. . . . . .
Lake st	13th av S . . .	18th av S . .	Both .	6	35	1,520.6	. . . . .	821.13	. . . . . .
16th av S . . .	25th st	Lake st . . .	Both .	6	52	2,265.9	. . . . .	1,223.58	. . . . . .
17th av S . . .	26th st	Lake st . . .	Both .	6	27	1,151.9	. . . . .	621.99	. . . . . .
10th av S . . .	25th st	36th st . . .	Both .	6	131	5,259.7	. . . . .	2,840.04	. . . . . .
12th av S . . .	26th st	36th st . . .	Both .	6	56	2,084.6	. . . . .	1,125.77	. . . . . .
24th st	16th av S . . .	17th av S . .	South .	6	8	281.5	. . . . .	152.01	. . . . . .
25th st	10th av S . . .	Cedar av . .	Both .	6	6	949.8	. . . . .	512.88	. . . . . .
26th st	12th av	Cedar av . .	Both .	6	11	1,073.6	. . . . .	579·70	. . . . . .
27th st	Chicago av . .	Cedar av . .	Both .	6	3	408.9	. . . . .	220.81	. . . . . .
28th st	Chicago av . .	Cedar av . .	Both .	6	32	2.799.3	. . . . .	1,511.62	. . . . . .
31st st	Chicago av . .	Cedar av . .	Both .	6	2	270.5	. . . . .	146.07	. . . . . .
32nd st	14th av	Cedar av . .	Both .	6	16	2,032.3	. . . . .	1,097.44	. . . . . .
33rd st	Chicago av . .	Cedar av . .	Both .	6	6	522.2	. . . . .	281.99	. . . . . .
35th st	Chicago av . .	Bloomington	Both .	6	32	4,240.0	. . . . .	2,289.54	. . . . . .
Total . . .	. . . .	. . . .	. . . . .	. .	780	41,777.8	. . . . .	$22,558.83	. . . . . .
8TH WARD—									
Aldrich av S .	Franklin av . .	33rd st . . .	Both .	6	76	3,560.7	. . . . .	1,922.77	. . . . . .
Blaisdell av .	26th st	34th st . . .	Both .	6	29	1,587.3	. . . . .	857.14	. . . . . .
Bryant av . .	Franklin av .	Lake st . . .	Both .	6	39	1,764.8	. . . . .	932.68	. . . . . .
Chicago av . .	32nd st	34th st . . .	West. .	6	20	837.2	. . . . .	452.08	. . . . . .
Clinton av . .	27th st	33d st. . . .	Both .	6	45	2,167.0	. . . . .	1,170.18	. . . . . .
Colfax av . . .	Franklin av .	29th st . . .	Both .	6	49	1,975.6	. . . . .	1,066.84	. . . . . .
Columbus av .	28th st	29th st . . .	East .	6	9	412.4	. . . . .	222.70	. . . . . .
Dupont av . .	Hennepin av .	29th st . . .	Both .	6	51	2,208.0	. . . . .	1,192.31	. . . . . .
Emerson av. .	27th st	28th st . . .	Both .	6	19	743.5	. . . . .	401.49	. . . . . .
Franklin av .	Lyndale av . .	Aldrich av .	South.	6	1	138.7	. . . . .	74.90	. . . . . .
Franklin av .	Aldrich av . .	Hennepin av	South.	6	4	465.1	. . . . .	251.16	. . . . . .
Franklin av .	Lk. Isles Boul.	Penn av. . .	Both .	6	1	154.0	. . . . .	83.16	. . . . . .
Fremont av. .	26th st	29th st . . .	Both .	6	28	1,146.6	. . . . .	619.16	. . . . . .
1st av S. . . .	25th st	34th st . . .	Both .	6	25	1,144.0	. . . . .	617.75	. . . . . .
4th av S. . . .	24th st	33d st. . . .	Both .	6	53	2,445.7	. . . . .	1,320.67	. . . . . .
5th av S. . . .	24th st	32d st. . . .	Both .	6	25	1,174.2	. . . . .	634.07	. . . . . .

TABLE NO. 25.—*Continued.*

STREET.	From—	To—	Side.	Width in feet.	No. of descriptions.	Length Assessed.		Amount of Assessment.	
						Artificial Stone. Feet. 10ths	Plank. Feet.	Artificial stone.	Plank.
8TH WARD—	*Continued.*								
Garfield av	25th st	32d st.	Both	6	32	1,459.6	.....	788.18	......
Girard av S.	22d st.	28th st	Both	6	11	449.2	.....	242.56	......
Grand av	Franklin av	31st st	Both	6	6	205.0	.....	110.70	......
Harriet av	Franklin av	32d st.	Both	6	41	1,712.8	.....	925.06	......
Hennepin av	Lake st	32d st.	East	6	11	533.6	.....	288.14	......
Holmes av	Lake st	31st st	East	6	5	285.0	.....	153.90	......
Humboldt av	22d st.	25th st	West	6	19	1,215.7	.....	656 48	......
Irving av	24th st	34th st	Both	6	38	222.7	.....	120.26	......
James av	Franklin av	31st st	West	6	18	1,160.0	.....	626.40	......
Lake st	Nicollet av	Chicago av	Both	6	57	3,443.4	.....	1,859.44	......
Lake st	Blaisdell av	Girard av	Both	6	21	1,830.9	.....	988.68	......
Lyndale av	Franklin av	25th st	Both	6	32	1,452.9	.....	1,046.09	......
Lyndale av	25th st	34th st	Both	6	93	4,032 6	.....	2,177.60	......
Motor av	Lake st	32d st.	Both	4	3	228.5	.....	82.26	......
Nicollet av	Franklin av	22d st.	West	6	2	151.1	.....	81.59	......
Nicollet av	24th st	34th st	Both	6	42	2,736.1	.....	1,477.49	......
Oakland av.	26th st	H. & D. Ry.	Both	6	23	1,130,1	.....	610.26	......
Park av.	28th st	29th st	West	8	1	40.9	.....	29.45	......
Park av.	32d st.	34th st	East.	6	24	1,005.6	.....	543.02	......
Pillsbury av	Franklin av	34th st	Both	6	182	8.708.7	.....	4,702 69	......
Pleasant av.	22d st	24th st	West	8	9	378.4	.....	272.45	......
Pleasant av.	25th st	34th st	Both	6	50	2,386.3	.....	1,288.60	......
Queen av	Franklin av	21st st	East.	6	1	92.0	.....	49.68	......
Stevens av	26th st	29th st	West	6	5	235.9	.....	127.39	......
Stevens av	29th st	34th st	Both	6	13	598.4	.....	323.14	......
21st st	Lk. Isles Boul.	Thomas Pl.	Both	6	10	985.5	.....	532.17	......
22d st.	Lyndale av	James av	Both	6	6	799.0	.....	431.45	......
24th st	Lyndale av	Hennepin av	Both	6	13	1,693.0	.....	914.24	......
24th st	Nicollet av	5th av S.	South.	6	3	402.5	.....	217.35	......
25th st	Nicollet av	Humboldt av	Both	6	16	2,311.9	.....	1,248.42	......
25th st	Nicollet av	1st av S.	North.	6	1	131.0	.....	70.74	......
26th st	Stevens av	Portland av.	South.	6	5	671.1	.....	362.40	......
26th st	Lyndale av	Humboldt av	Both	6	8	1,286.7	.....	694.81	......
27th st	Blaisdell av.	Humboldt av	Both	6	13	1,879 8	.....	1,015.99	......
27th st	Clinton av	5th av S.	Both	6	4	269.0	.....	145.26	......
28th st	Nicollet av	Fremont av.	Both	6	27	2,433.6	.....	1,314.11	......
29th st	Blaisdell av.	Pleasant av.	Both	6	23	1,088.0	.....	587.52	......
29th st	Nicollet av	Stevens av	South.	6	2	266.5	.....	143.91	......
28th st	4th av S.	5th av S.	South.	6	2	268,5	.....	144.99	......
3d av S	28th st	34th st	Both	6	24	1,099.1	.....	593.52	......
31st st	1st av S.	Stevens av	South.	6	1	131.3	.....	70.90	......
31st st	Nicollet av	Lk. Calhoun Boulevard.	Both	6	43	4,103.5	.....	2,215.89	......
32d st.	Nicollet av	Bryant av.	Both	6	30	2,144.9	.....	$1,158.25	......
32d st.	Nicollet av	Stevens av	Both	6	5	655.0	.....	353.70	......
33d st.	Nicollet av	Chicago av	Both	6	8	1,017.1	.....	549.23	......
33d st.	Nicollet av	Harriet av	South	6	21	1,186.4	.....	640.65	......
34th st	Blaisdell av.	Pleasant av	North	6	15	701 1	.....	378.59	......
34th st	Nicollet av	1st av S	North	6	1	127.5	.....	68.85	......
Total	....	....	....	..	1494	83,272.2	.....	$45,242.61	......
9TH WARD—									
Filmore st	Winter st	26th av NE	Both	6	37	1,501.9	.....	$811.03	......
5th st NE.	8th av.	Broadway st	East	6	1	201.5	.....	108.81	......
15th av NE.	6th st	Jefferson st	South	6	2	282.3	.....	152.44	......
Jackson st	19th av NE	2 th av NE	Both	6	26	1,276.7	.....	689.42	......
Lincoln st	22d av NE	25th av NE	Both	6	23	1,156.1	.....	624.29	......
Madison st	13th av NE	15th av NE	West	6	6	240.0	.....	129.60	......
Monroe st.	18½ av NE	24th av NE	Both	6	20	1,110.2	.....	599.51	......
19th av NE.	Monroe st.	Polk st	Both	6	35	1,899.8	.....	1,045.90	......
Pierce st	Spring st	26th av NE	Both	6	46	1,933.2	.....	1,043.83	......
Polk st	18th av NE	23d av NE	Both	6	36	2,014.0	.....	1,087.56	......
Quincy st	3d av NE	Spring st	Both	6	10	467.3	.....	252.34	......
20th av NE.	Jackson st	Central av	Both	6	10	689.0	.....	372.07	......
22d av NE	Central av	Lincoln.	Both	6	22	1,745.6	.....	942.65	......
23d av NE	Central av	Filmore st	South	6	13	710.4	.....	383 61	......
24th av NE.	Monroe st.	Central av	Both	6	29	1,659.5	.....	896.13	......
Total	....	....	....		316	16,887.5	.....	$9,119.19	......

TABLE No. 25—*Continued.*

STREET.	From—	To—	Side.	Width in feet.	No. of descriptions.	Length Assessed		Amount of Assessment	
						Artificial Stone. Feet. 10ths	Plank. Feet.	Artificial Stone.	Plank.
10TH WARD—									
Colfax av	34th av N.	35th av N.	Both	6	26	.....	1,230.4	.....	$332.22
Colfax av	40th av N.	Wash. av N	Both	6	58	3,353.4	.....	$1,811.35	.....
Emerson av.	33d av N	34th av N.	Both	6	26	.....	1,225.3	.....	330 85
44th av N.	Humboldt av	Penn av.	North	6	8	.....	2,601.0	.....	702.27
Humboldt av	26th av N.	27th av N.	Both	6	16	.....	1,226.8	.....	331.22
Humboldt av	29th av N.	30th av N.	Both	6	28	.....	1,219.9	.....	329.38
Logan av	32d av N	33d av N	West	6	16	.....	603.2	.....	162.86
Russell av.	30th av N.	32d av N	East	6	15	.....	603.3	.....	162.90
6th st N.	29th av	30th av	West	6	1	113.5	.....	61.29	.....
27th av N.	Wash. av N	3d st.	South	6	1	168 5	.....	90.99	.....
29th av N.	6th st	Lyndale av	North	6	1	108.5	.....	58 59	.....
30th av N.	Humboldt av	Irving av	Both	6	4	.....	526.8	.....	142.24
30th av N.	Knox av	Logan av	North	6	2	.....	258.4	.....	69.77
32d av N	Wash. av	2d st.	South	6	2	246.6	.....	133.16	.....
32d av N	Wash. av	3d st.	North	6	2	330.5	.....	178.47	.....
33d av N	Lyndale av	Aldrich av.	Both	6	4	.....	578.8	.....	156.28
2d st N	26th av	32d av.	West	6	43	2,340.3	.....	1,263.76	.....
Total	....	....	.....	..	253	6,961.3	9,773.9	$3,589.61	$2,727.99
11TH WARD—									
Blo'mingt'n av	Franklin av.	24th st.	Both	6	9	708.3	.....	381.92	.....
Cedar av	8th st	24th st.	Both	8	7	281.2	.....	202.46	.....
8th st S	10th av	29th av	Both	8	30	1,749.9	.....	1,280.09	.....
8th st S	27th av	28th av	South	6	7	224.0	.....	120.96	.....
11th av S	Franklin av.	21st st.	West	8	1	60.0	.....	43.20	.....
11th av S	7th st	8th st	West	2	1	179.0	.....	32.22	.....
18th st S	13th av	14th av	North	6	2	288.0	.....	155.52	.....
Franklin av.	10th av S	Minneh. av	Both	12	25	1,021.4	.....	1,165.07	.....
Franklin av.	11th av S	12th av S	South	12	1	28.3	.....	129.28	.....
Franklin av	20th av S	30th av S	North	8	53	2,190.6	.....	1,577.19	.....
14th av S	7th st	Franklin av	Both	8	8	552.0	.....	397.44	.....
14th av S	Franklin av.	21st st	East.	6	1	137.6	.....	74.30	.....
14th st	10th av S	11th av S	North	6	1	169.5	.....	91.53	.....
15th av S	7th st	9th st	Both	8	8	585.3	.....	421.42	.....
15th av S	Franklin av.	23rd st	Both	6	4	421.8	.....	227.77	.....
15th st	10th av S	11th av S	Both	6	2	339.0	.....	183.06	.....
Minnehaha av	9th st.	24th st	Both	8	12	714.9	.....	514.71	.....
Minnehaha av	Cedar av	19th av	North	15	4	272.9	.....	368.42	.....
9th st S	20th av	21st av	South	6	5	275.5	.....	148.77	.....
9th st S	Cedar av	29th av	Both	8	25	1,057.7	.....	561.55	.....
19th av S	7th st	Franklin av	Both	6	9	573.2	.....	309.52	.....
19th st	Railroad	17th av S	Both	6	5	311.9	.....	168.43	.....
Riverside av	8th st	9th st	South	6	1	50.0	.....	27.00	.....
Riverside av	26th av S	Franklin av	Both	8	38	1,486.8	.....	1,070.49	.....
Snelling av	Franklin av	24th st	Both	6	9	375.0	.....	202.50	.....
7th st S	15th av	27th av	South	8	18	804.0	.....	578.88	.....
7½ st S	22nd av.	23rd av S	North	6	1	69.0	.....	37.26	.....
16th av S	Franklin av	22nd st	West.	6	1	59.4	.....	32.08	.....
17th av S	7th st	8th st	West.	8	2	272.0	.....	195.84	.....
17th av S	8th st	22nd st	Both	6	27	1,273.7	.....	687.80	.....
12th av S	Franklin av	24th st	Both	4	11	805.3	.....	289.93	.....
13th av S	7th st	19th st	Both	8	4	240.8	.....	173.38	.....
13th av S	19th av	23rd st	Both	6	8	586.2	.....	316.54	.....
20th av S	7th st	Franklin av	East.	6	10	598.1	.....	322.97	.....
21st av S	8th st	9th st	East.	6	5	168.0	.....	90.72	.....
21st av S	9th st	Franklin av	West.	8	6	403.2	.....	290 30	.....
22d av S	8½ st	9th st	East.	8	1	63.5	.....	45.92	.....
22d st.	23d av S.	29th av S	Both	8	7	361.5	.....	$260.28	.....
22d st.	25th av S	27th av S	Both	6	20	842.5	.....	454.95	.....
22½ av S	Franklin av.	24th st	Both	6	17	389.6	.....	210.38	.....
23d av S.	7th st	22d st	Both	8	4	223.7	.....	161.06	.....
24th av S	Riverside av.	Franklin av.	Both	8	5	283.2	.....	203.90	.....
24th st	17th av S	Cedar av.	North	6	8	231.1	.....	124.79	.....
24th st	18th av S	27th av S	North	8	8	949 8	.....	683.86	.....
25th av S	8th st	22d st	Both	8	29	1,671.6	.....	1,203.57	.....
25th av S	7th st	24th st	Both	6	21	1,053.6	.....	568.94	.....
26th av S	7th st	Franklin av.	Both	6	26	1,277.2	.....	689.69	.....
26th av S	Riverside av.	24th st	Both	8	16	756.7	.....	544.83	.....
27th av S	7th st	8th st	West	6	2	145.0	.....	78.30	.....
27th av S	Franklin av.	22d st	East	2	3	304.2	.....	54.76	.....
27th av S	Riverside av.	22d st	Both	8	20	904.9	.....	651.52	.....

TABLE NO. 25.—*Continued.*

STREET.	From—	To—	Side.	Width in feet.	No. of descriptions.	Length Assessed.		Amount of Assessment.	
						Artificial stone. Feet. 10ths	Plank. Feet.	Artificial stone.	Plank.
11TH WARD—	*Continued.*								
28th av S	9th st	Franklin av.	East	6	2	135.3	.....	73.06	......
28th av S	8th st	24th st	Both	8	18	886.6	.....	638.35	......
29th av S	8th st	Franklin av.	Both	6	10	621.8	.....	335.77	......
Total	....	......	....	..	578	30,434.3	.....	$19,854.45	......
12TH WARD—									
Lake st	Snelling av	28th av	North	6	2	277.0	.....	149.58	......
Minnehaha av.	26th st.	32d av.	Both	6	28	1,377.0	.....	743.58	......
24th st	25th av S	30th av S	South	6	4	679.0	.....	336.66	......
25th av S	24th st	25th st	Both	6	6	254.0	.....	137.16	......
25th st	Minnehaha av.	31st av	Both	6	13	650.1	.....	351.05	......
26th av S	24th st	29th st	Both	6	19	802.4	.....	433.30	......
26th st	26th av S	27th av S	North	6	4	166.0	.....	89.64	......
27th av S	Minnehaha av.	26th st	East	6	21	1,356.4	.....	732.48	......
28th av S	25th st	29th st	East	6	25	1,418.7	.....	$ 766.10	......
28th st S	26th av	28th av	Both	6	7	965 0	.....	521.10	......
29th av S	24th st	28th st	Both	6	49	2,395.8	.....	1,293.77	......
29th st S	26th av	27th av	Both	6	8	664.5	.....	358.83	......
30th av S	24th st	28th st	Both	6	32	1,536.4	.....	829.66	......
Total	....	......	....	..	218	12,542.3	.....	$6,742.91	......
13TH WARD—									
Harriet av	39th st	40th st	West	6	15	.....	614.6	......	$ 165.92
Oakland av	36th st	38th st	West	6	24	1,222.8	.....	$ 660.31	......
Park av.	37th st	38th st	East	6	18	453.8	.....	245.05	......
Pleasant av	34th st	35th st	West	6	13	611.7	.....	330 32	......
Portland av	34th st	40th st	West	6	64	2,688.6	.....	1,451.84	......
3d av S	34th st	38th st	Both	6	48	2,443 5	.....	1,319.49	......
3d av S	37th st	38th st	East	6	10	409.5	.....	221.13	......
34th st	1st av S	Nicollet av	South	6	3	272.5	.....	147.15	......
39th st	Bryant av.	Harriet av	South	6	8	.....	1,099.0	......	296.73
37th St	Columbus av	Chicago av	North	6	2	275 5	.....	148.77	......
Total	....	....	....	..	205	8,377.9	1,713.6	$4,524.06	$ 462.65

*All built.

TABLE No. 26.

Summary of Sidewalks Ordered for 1901.

WARDS.	ARTIFICIAL STONE.		PLANK.		TOTALS.	
	Feet.	Assessment.	Feet.	Assessment.	Feet.	Assessment.
First	47,483.0	$25.803.25	. . . . . .	. . . . . .	47,483.0	$25,803.25
Second	18,686.0	10,630.41	. . . . . .	. . . . . .	18,686.0	10,630.41
Third	86,572.9	49 459.66	. . . . . .	. . . . . .	86,572.9	49,459.66
Fourth	30,934.0	17,657.21	1,056.4	285.23	31,990.4	17,942.54
Fifth . . .	15,756.5	9,743.93	. . . . . .	. . . . . .	15,756.5	9,743.93
Sixth	31,670.8	23.226.85	. . . . . .	. . . . . .	31,670.8	23,226.85
Seventh. . .	41,777.8	22,558 83	. . . . . .	. . . . . .	41,777.8	22,558 83
Eighth	83,272.2	45,242.61	. . . . . .	. . . . . .	83,272.2	45,242.61
Ninth.	16.887.5	9,119.19	. . . . . .	. . . . . .	16.887.5	9,119.19
Tenth.	6,661.3	3,597.61	10,073.9	2,719.99	16.735.2	6,317.60
Eleventh . . .	30,434.3	19,854.45	. . . . . .	. . . . . .	30,434.3	19,854.45
Twelfth. . . .	12,542.3	6,742.91	. . . . . .	. . . . . .	12,542.3	6,742 91
Thirteenth . .	8,377.9	4,524.06	1,713.6	462.65	10,091.5	4.986.71
Totals. . .	431,056.5	$248,160.97	12,843.9	$3,467.87	443,900.4	$251,628.84

TABLE NO. 27.

Bridges Over Rivers and Creeks.

NAME.	OVER.	KIND.	No. Spans.	Total Length Feet.	Width.	Width.	Conditions.	Total Co t.
					Roadways.	Sidewalks.		
Twentieth av N.	Mississippi river	Iron Pratt truss.	4	805	36	6	Good	$109,110.03
Plymouth av.	Mississippi river	Iron Pratt truss and wooden trestle	9	1,561	18	6	Good	68,500.00
Hennepin steel arch	West channel Mississippi river	2 and 3 hinged arch	2	544	56	12	Good	266,375.32
Stone arch	East channel Mississippi river	1-2 stone arch and 1-2 steel girders	5	354	56	12	Good	70,427.00
Hennepin island	East channel Mississippi river	Wooden trestle	11	360	20	7	Fair	4,894.18
Tenth av S	Mississippi river	Iron Pratt truss and wooden trestle	8	1,143	17	5⅓	Poor	160,000.00
Washington av S	Mississippi river	Iron Pratt truss.	6	1,084	18	6	Good	137,367.18
Franklin av.	Mississippi river	Iron Pratt truss.	5	1,025	18¼	6	Good	143,430.27
Lake st	Mississippi river	Iron braced arch	5	1,270	18	6	Good	155,000 00
First st and Sixth av S	Minneapolis Mill Co.'s canal.	Iron plate girder	14	266	36	....	Good	10,004.52
First st N	Bassett's creek	Stone arch	1	29	67¾	15	Good	6,000.00
Second st N.	Bassett's creek	Stone arch	1	30	52½	15	Good	6,922.49
Washington av N.	Bassett's creek	Stone arch	1	30	64	18	Good	8,684.84
Third st N	Bassett's creek	Stone arch	1	31	52½	15	Good	10,633.63
Fourth st N.	Bassett's creek	Stone arch	1	29	52½	15	Good	8,040.29
Fifth st N.	Bassett's creek	Wooden stringers.	1	24½	52½	15	Good	3,007.09
Tenth av N	Bassett's creek	Stone arch	1	28	22	12	Good	7,154.30
Lyndale av N	Bassett's creek	Stone arch	1	29	40	11½	Good	6,149.68
Eighth av N	Bassett's creek	Wooden stringers.	1	30	34	6	Good	319.28
Aldrich av	Bassett's creek	Pile bridge	1	23½	18	6	Good	289.94
Bryant av N	Bassett's creek	Stone arch	1	30	42	12	Good	4,918.80
Sixth av N	Bassett's creek	Steel "I" beams	1	18	156	....	Good	4,299.28
Dupont av N	Bassett's creek	Stone abutments, wooden floor	1	400	22	....	Good	9,862.27
Dupont av N	Bassett's creek	Box culverts.	1	1,125	18	....	Poor	....
Western av near Dupont av	Bassett's creek	Wooden stringers.	1	20	44	6	Good	1,980.39
Second av N	Bassett's creek	Pile bridge	1	20	17.6	....	Good	140.27
Cedar Lake road	Bassett's creek	Stone arch and Wooden trestle	1	30	40	11	Fair	9,233.75
Penn av.	Bassett's creek	Pile bridge	2	31	18	....	Fair	149.33
Western av near Upton av.	Bassett's creek	Concrete arch.	1	32	36	....	Good	6,516.28
Sixth av N near Keegan's lake.	Bassett's creek	Pile bridge	4	80	18	....	Good	....
Minnehaha park	Minnehaha creek.	Wooden trestle	18	365	....	7	Good	1,200.00
Minnehaha av	Minnehaha creek.	Stone arch	1	35	48	6	Good	5,982.87

Thirty-fourth av S	Minnehaha creek	Pile bridge	4	53	24		Good	470.95
Twenty-eighth av S	Minnehaha creek	Pile bridge	4	60	24		Good	323.41
Cedar av	Minnehaha creek	Pile bridge	2	40	27½		Good	254.14
Chicago av	Minnehaha creek	Wooden trestle	5	100	20		Good	186.40
Portland av	Minnehaha creek	Howe truss	1	44	16		Fair	
Nicollet av	Minnehaha creek	Steel trestle	27	831½	19	6	Good	8,620.70
Xerxes av	Minnehaha creek	Wooden stringers	1	24	20		Good	152.19
Lyndale av	Minnehaha creek	Stone arch	1	32	36	6	Good	9,401 12
Penn av	Minnehaha creek	Queen Post truss	1	42½	17		Good	220.51
Fiftieth st near Irving av	Outlet from Lake Harriet	Pile bridge	2	31	20		Good	
Humboldt av	Shingle creek	Wooden trestle	2	38	16.67		Good	91.19
Forty-fourth av N	Shingle creek	Pile bridge	2	32	24		Good	134.20
Lyndale av N	Shingle creek	Steel "I" beams	1	26½	32	6	Good	3,183.48
Osseo road	Shingle creek	Stone abutments, wooden stringers	1	18	27		Good	1,027.48
Superior av	Horseshoe lake	Pile bridge	11	209	24		Good	881.16
Fourth st SE	University creek	Stone arch	2		40		Good	7,309.07
Seventh av SE	University creek	Stone arch	1		40		Good	2,700.05
University av SE	University creek	Stone arch	1		40		Good	3,075.45
Eighth av SE	University creek	Stone arch	1		40		Good	
Fifth st SE	University creek	Stone arch	1		40		Good	
University av SE	Tuttle creek	Stone arch	1	8	40		Fair	
University av and 25th av SE	Bridal Veil creek	Brick arch culvert	1	5 ft. 8½			Good	461.72
Marshall st near 26th av NE	Graham creek	Stone arch	1	13	42	12	Good	651.54
Excelsior road	Webber creek	Pile culvert	1	8	50		Good	139.17

TABLE No. 28.

Bridges Over Railways and Streets.

NAME.	OVER.	KIND.	No. Spans.	Total Length Feet.	Width.	Width.	Condition.	Total Cost.
					Roadways.	Sidewalks.		
Hennepin av	Mpls. & St. L. R'y	Iron girder	4	67	108	15 to18	Good	
Hennepin av	Gt. N. R'y	Iron girder	7	240	56 to106	12 to18	Good	
First st N.	Mpls. & St. L. and Gt. N. R'ys.	Iron Pratt truss	1	110	36	6	Good	
Second st N.	Mpls. & St. L. and Gt. N. R'ys.	Steel and Iron Pratt truss	1	137	36	8	Good	
Washington av N.	Mpls. & St. L. and Gt. N. R'ys.	Iron Pratt truss	1	109	66	15	Good	
Third st N	Mpls. & St. L. and Gt. N. R'ys.	Iron Pratt truss and girder	11	555	36	8	Good	
Fourth st N.	Mpls. & St. L. and Gt. N. R'ys.	Iron Pratt truss and plate girder	17	516½	36	6	Good	
Fifth st N.	Mpls. & St. L. and Gt. N. R'ys.	Iron Pratt truss and plate girder	14	482	36	6	Good	
Seventh st N	Mpls. & St. L. and Gt. N. R'ys.	Plate girder, Pratt truss, wooden tres'l	7	606	39.2	6	Good	$37,297.04
Holden st.	Mpls. & St. L. and Gt. N. R'ys.	Iron girder and wooden trestle	9	147	27	6	Fair..	
Western av	Mpls. & St. L. and Gt. N. R'ys.	Iron girder	7	177	32	8	Fair..	
Lyndale av	Mpls. & St. L. and Gt. N. R'ys.	Pratt truss girder and wooden trestle	19	469	36	8	Good	34,789.72
Laurel av	Mpls. & St. L. and Gt. N. R'ys	Iron Pratt truss, lattice girder, wooden trestle	4	1,614	18	6	Good	54,492.13
Superior av	Mpls. & St. L. and Gt. N. R'ys.	Combination wooden truss	1	116	16	6	Good	3,092.84
Kenwood av	Mpls. & St. L. and Gt. N. R'ys.	Iron and steel Pratt truss	3	289.5	24	....	Good	8,848.65
Cedar Lake road	Gt. N. R'y, Osseo Branch	Iron bowstring truss	1	78	42	10	Good	
Western av near Upton av	Gt. N. R'y, Osseo Branch	Wooden trestle	5	79	29	8¼	Good	
Nicollet st	Gt. N. R'y	Wooden trestle	1	230⅓	18	6	Good	6,520.82
		Steel plate girder	1					
Main st NE	Gt. N. R'y	Steel plate girder	1	44	56	9	Good	34,946.13
Second st NE	Gt. N. R'y	Steel plate girder	1	59	40	12	Good	16,463 59
University av NE	Gt. N. R'y	Steel plate girder	1	84	40	12	Good	17,996.62
Fourth st NE	Gt. N. R'y	Steel plate girder	1	85	36	12	Good	13,007.61
Fifth st NE	Gt. N. R'y	Steel plate girder	4	216	40	6	Good	28,528.07
Seventh st NE	Gt. N. R'y	Steel plate girder	3	167	40	12	Good	26,421.60
Central av and Ninth st	Gt. N. R'y	Steel plate girder	2	200	56	12	Good	55,186.86
Central av and Broadway	Gt. N. R'y	Steel plate girder	3	252	51	6	Good	79,477.81
Broadway and Central	Gt. N. R'y	Steel plate girder	2	80	40	6		
		Wooden trestle	..	534	24¾	6		
Como and Tenth av SE Viaduct	Como and Tenth av SE	Steel plate girder	..	....	100	....	Good	
Fifteenth av SE, near Eighth st	Fifteenth av SE	Iron plate girder	1	59	100	....	Good	22,886,03

Fifteenth av SE and Fourth st.	Gt. N. R'y	Iron girder	4	100	36	6	Fair..	
Fourth st SE and Fifteenth av	Gt. N. R'y	Iron girder	5	131½	38	5½	Good	
Fourteenth av SE	Gt. N. R'y	Iron girder	5	100	20		Fair..	
University av SE	Gt. N. R'y	Iron girder	5	130½	39	12	Fair..	
Univ. and Twenty-ninth avs NE.	Gt. N. and N. P. R'ys	Howe truss	1				Good	
		Wooden trestle	1	1,063	18	8½	Fair..	$10,689.00
Plymouth av viaduct	Plymouth av and First st N	Iron Pratt truss						
Twentieth av N. viaduct	Twentieth av N	Steel plate girder	3	106			Good	
Fourth av N	St. P. & N. P. R'y	Iron lattice girder	1	48	28	8	Good	
Pleasant st	St. P. & N. P. R'y	Iron lattice girder	3	95	27	8	Good	
State st	St. P. & N. P. R'y	Pony truss	1				Good	
		Wooden trestle	5	113	16	5½	Good	
Church st	St. P. & N. P. R'y	Iron lattice girder	3	82	26½	8	Good	
Washington av viaduct	Washington av	Iron girder					Good	35,902.64
Thirty-first av S, near 27th st	Thirty-first av S	Steel plate girder	3	89	40		Good	12,428.14
Fourth av S viaduct	Fonrth av S	Pile bents	4	68	12		Good	
Fifth av S viaduct	Fifth av S	Wooden bents	6	99	14		Good	
Hennepin av	C. M. & St. P. R'y	Steel plate girder	3	95	66	11	Good	18,049.91
W. Lake st	C. M. & St. P. and Mpls. & St. L. Ry's	Single wooden truss, wooden trestle	2	1,155	36		Fair..	9,402.98
Dean boulevard	Boulevard	Iron girder	3	94.5	9		Good	5,200.00
First st near Third av	M. Eastern and Mpls. & St. L. R'ys	Iron Warren truss	1	82	29	8	Good	
Tenth av S. viaduct	Tenth av S	Iron plate girder	1	45.8	125		Good	
Tenth av S. viaduct	Tenth av S	Iron plate girder	1	45.8	50		Good	
W. Thirty-sixth st viaduct	Thirty-sixth st near Lake Calhoun	Iron plate girder	1	36	24		Good	6,185.48
"Soo" st	"Soo" st	Steel plate girder	1	39	40		Good	11,181.63
First st N	Twentieth av N	Iron plate girder	3	110	18	6	Good	5,316.72

TABLE NO. 29.

New Bridges Completed, Repairs and Maintenance, Etc., for 1900.

New Bridges Constructed in 1900—	
Dupont Av. bridge over Bassett's creek	$4,748.11
Bridge Repairs and Maintenance—	
6th Av. N., over Bassett's creek, at Dupont Av	9.76
10th Av. S., over river	24.97
Washington Av. S., over river	331.31
Laurel Av., over G. N. & M. & St. L. Ry	94 96
Plymouth Av., over river	2,960.68
Osseo road, bridge over Shingle creek	3.50
University and 29th Av. NE., over G. N. & N. P. Ry	87.50
West Lake St., over C. M. & St. P. & M. & St. L. Ry	2,856.83
Nicollet Av., over Minnehaha creek	23.30
4th Av. N., over Bassett's creek, near Dupont Av	47.98
6th Av. N., over Bassett's creek, near Keegan's lake	63.15
34th Av. S., over Minnehaha creek	17.69
Steel Arch bridge, over river	23.48
Lyndale Av., over Gt. N. and M. & St. L. Ry	65.56
East Lake St., over river	336.33
University Av., over Gt. N. Ry., near 14th Av. SE	137.65
Franklin Av., over river	21,18
2nd St. N., over Gt. N. Ry	536.14
5th St. N., bridge over Bassett's creek	2.15
Central Av. and Broadway, over Gt. N. Ry	44.63
Main St. and 2nd Av. NE., over Gt. N. Ry	256.96
Cedar Av., bridge over Lake Amelia	80.82
10th Av. N., over Bassett's creek	10.50
5th St. and 2nd Av. NE., over Gt. N. Ry	8.05
4th St. and 2nd Av. NE., over Gt. N. Ry	2.52
2nd St. and 2nd Av. NE., over Gt. N. Ry	32.75
University Av. and 2nd Av. NE., over Gt. N. Ry	3.51
Central Av. and 9th St., over Gt. N. Ry	47.31
20th Av. N., over river	56.08
15th Av. SE. and 4th St., over Gt. N. Ry	328.74
Western Av., over M. & St. L. and Gt. N. Ry	9.93
Broadway and Central Av., over Gt. N. Ry	19.25
Lyndale Av., over Minnehaha creek	915.04
Lyddale Av., ovner Bassett'c creek	7.45
Washington Av., over Gt. N. Ry	56.26
Superior Av., over Horseshoe lake	17.25
Western Av., over Bassett creek	12.35
Hillside cemetery bridge	17.20
1st St. and 6th Av. S., over canal	5.44
Dupont Av., over Bassett's creek	18.65
Cedar lake road, bridge over Bassett's creek	6.25
Church St., over N. P. Ry	10.07
Lyndale Av., over Shingle creek	3.50
Bridge tools and general repairs	597.10
Miscellaneous Items—	
Watering trough	27.10
10th Av. S., dump	22.01
Total	$15,008.95

TABLE NO. 30.

Streets Opened and Vacated in 1900.

STREET.	From—	To—	Opened, vacated or deeded.	PLAT.		Date of confirmation.	Width opened in feet.	Width of street in feet.	Length opened in feet.	Length vacated in feet.	Square feet opened.
				Book.	Page.						
Belmont av	Fifty-second st	Minnehaha Boul.	V	9	1	October 26th		50		296	
Camden av	Forty-seventh av N	Forty-ninth av N	O	9	1	October 26th	Irregular.	66	1,315		64,812
Eighteenth av N	First st	River	V	8	47	February 9th		66		365	
Fifth st NE	Twenty-sixth av	N. line lot 3, block 6, Phillips Addition	V	9	1	August 31st		66		138	
*Hennepin av	Lyndale av	Lake st				August 31st		88		5,590	
Main st SE	E. line Eighth av	W. line 9th av	V	8	47	March 30th		80		330	
Ninth st S.	E. line Thirtieth av	Riverside av	V	8	47	March 30th		80		100	
Riverside av	E. line Thirtieth av produced to Riverside av	Franklin av	V	8	47	March 30th		80		700	
A strip of land adjoining lots 4, 5, 6, Blk. 1, McFarlane's Add. on Second av N	Lyndale av	Aldrich av	V	8	47	March 30th		80		161	
Union st	N. line St. Anthony City	University av	O	9	1	November 27th	40	40	178		7,120
Thirty-second av N.	Dupont av	Emerson av	O	9	1		Irregular.	80	255		1,483
*Lyndale av N	Twentieth av	Twenty-fourth av				November 11th		66		1,412	
Total									1,748	9,092	73,415
Acres											1.687

*Turned over to Park Board.

TABLE No. 31.

Alleys Opened or Vacated in 1900.

Block	ADDITION.	From—	To—	Opened, vacated or deeded.	PLAT.		Date of confirmation or number of deed.	Width opened or vacated in feet.	Width of alley in feet.	Length: opened or vacated in feet.	Square feet opened.
					Book.	Page.					
11	Baker's Second	12 ft. from S. line lots 5 and 22	32d st	V	7	39	Aug. 10	12	12	208	....
4	F. Cook's Riverside	Franklin av	30th av S	V	8	47	March 30	14	14	360	....
19	Hoyt's	22d av NE	23d av NE	O	8	50	Sept. 28	16	16	300	4,800
19	Hoyt's	Jackson st	N. & S. alley	O	8	50	Sept. 28	16	16	250	4,000
1	Lincoln st Sup.	23d av NE	25th av NE	O	8	50	Aug. 31	14	14	595	8,330
5	Morrison's to N. Minneapolis	31st av N	32d av N	O	8	50	Sept. 14	14	14	348	4,872
20	Groveland	N. Aldrich av	Center of Block	O	9	1	*Decree Dist. Court	20	20	135	2,700
	Total length opened									1,996	
	Total square feet										24,702
	Acres										0,567

*Engineer's File No. 42.

TABLE NO. 32.

Additions to Minneapolis Approved 1900.

	Number of tracing.	Date of Approval. 1900.	Number of lots platted.	Area platted exclusive of re-arrangements, Subdivisions, etc.—Feet.
Daly's Subdivision	1007	February 16	7	. . . . . .
Hilltop Addition to Minneapolis	1008	March 30	60	427,645
O'Callaghan's Addition to Minneapolis	1009	May 11	27	134,694
Johnson & Hallun's Riverside Addition to Minneapolis	1010	May 11	18	. . . . . .
Re-arrangement of Lots 16, 17, 18, 19, 20, 21 22 and 23, Auditor's Subdivision No. 18	1011	August 10	6	. . . . . .
Oak Tree Addition to Minneapolis	1012	August 10	60	345,367
Green's Fourth Addition to Minneapolis	1013	September 28	13	113,731
Summit Hill Addition to Minneapolis	1014	October 26	14	161,391
Wiegand's Addition to Minneapolis	1015	September 14	8	30,433
Tingley's Addition to Minneapolis	1016	September 14	47	317,014
Totals	. . . .	. . . .	260	1,530,275
Total acres	. . . .	. . . .	. .	35.178

TABLE NO. 33.

Levels Run, Grades Set, Surveys and Cross-Sections Made during the Season of 1900.

STREET.	From—	To—	Length in Feet.
	Levels Run.		
Washington av SE	Church	Oak st	860

Total number feet of levels	860
Total number miles of levels	0.16
Total number of grades set	3,426
Total number of cross-sections made	3
Total number of surveys made	26

Table No. 34.

Street Sprinkling for the Season of 1900.

The sprinkling of streets is done under the direction of the Street Commissioners and Aldermen of each ward. An assessment is levied in advance each year upon all assessable property on the street sprinkled at a uniform rate per front foot in each ward. The amount of tax thus raised by special assessment is made sufficient only to cover the balance after deducting from the estimated cost the amount of money on hand in the fund at the beginning of the year for which the assessment is made. The city furnishes the water free.

Wards.	Sprinkling Teams.					Cost.			Assesssment.				
	No. employed.	Average time per team. Months.	Monthly wages.	Average per team.	Average assessed frontage per team.	Incidentals.	Total including pay rolls.	Per front foot of assessed frontage.	Front Foot. Paved.	Front Foot. Dirt.	Paved streets.	Dirt streets.	Total.
				Feet.	Feet.			Cents.	Cents.	Cts.			
First	13	6.10	$85.00	6,662	11,182	$430.25	$7,304.00	4.70	4.0	4.0	$1,054.32	$5,160.46	$8,214.78
Second	13	6.44	85.00	8,214	13,611	612.90	7,325.90	4.14	4.0	3, 4	1,774.82	5,230.01	7,004.83
Third	21	5.41	85.00	7.401	13,594	1,221.67	10,863.83	4.11	3.0	3.0	2,664.63	5,929.24	8,593.87
Fourth	26	6.84	90.00	6,434	10,977	463.56	16,632.56	5.83	6.0, 10.0	4.0	6,698.33	7,602.00	14,300.33
Fifth	20	6.87	85.00	7,596	12,873	283.70	12,153.77	4.73	3, 4, 6, 10	3, 4, 7	3,994.63	5,814.15	9,808.78
Sixth	10	6.49	90.00	6,355	10,505	93.70	5,885.95	5.60	7.0	5.0	1,194.58	4,399.27	5,593,85
Seventh	14	6.16	90.00	7,737	13,461	195.85	8,108.35	4.32	.....	4.0	......	7,538.50	7,538.50
Eighth	28	5.61	90.00	8,883	15,941	405.45	14,883.45	3,33	3.0, 10.0	3, 7	608.16	13,344.11	13,952.27
Ninth	15	5.70	90.00	6.905	11,497	94.15	7,969.02	4.63	4.0	4.0	1,009.95	5,877.66	6,887.61
Tenth	9	6.00	90.00	7,960	13,901	356.00	3,668.00	4.40	4.0	4.0	178.63	3,157.68	3,336.31
Eleventh	14	6.71	90.00	6,971	12,053	164.30	8.797.30	5.21	4.5	4.5	607.62	6,941.71	7,549.33
Twelfth	3	7.27	90.00	7,048	11,648	35.85	2,024.85	5.80	.....	3.0	......	1,048.36	1,048.36
Thirteenth	5	5.86	90.00	6,887	11,957	66.05	2,761.13	4.62	.....	4.0	......	2,391.46	2,391.46
Totals	188	....	.....	7,410	12,758	$4,423.43	$108,378.11	4.52	5.07	3.70	$19,785.67	$74,434.61	$94,220.28

TABLE NO. 34.—*Continued.*

WARDS.	FRONTAGE.						LENGTH SPRINKLED.		
	ASSESSED.			EXEMPT.		Total paved and dirt streets.	Street inter-sections.	Totals.	
	Paved streets	Dirt streets.	Total,	Paved streets	Dirt streets.				
	Feet.	Feet.	Feet.	Feet.	Feet.	Feet.	Feet.	Feet.	Miles.
First	26,358	129,009	155,367	....	2,849	158,216	7,493	86,601	16.21
Second	44,370	132,570	176,940	5,948	7,307	190,295	11,689	106,786	20.22
Third	66,711	197,668	264,379	4,645	8,147	277,171	16,836	155,421	29.43
Fourth	95,360	190 046	285 406	4,638	6,464	296,508	19,034	167,288	31.68
Fifth	87,252	170,213	257,465	5,369	6,805	269,639	17,098	151,917	28.77
Sixth	17,065	87,988	105,053	682	4,619	110,254	8,375	63,552	12.03
Seventh	....	188,461	188,461	....	8,223	196,684	9,980	108,322	20.51
Eighth	9,404	436,929	446,333	....	8,252	454,585	21,436	248,728	47.10
Ninth	25,248	146,940	172,188	4,111	10,150	186,449	10,352	103,576	19.61
Tenth	4,466	78,939	83,405	....	3,456	86,861	4,329	47,759	9.04
Eleventh	13,503	155,242	168,745	593	5,695	175,033	10,081	97,597	18.48
Twelfth	....	34,944	34,944	....	1,900	36,844	2,720	21,142	4.00
Thirteenth	....	59,783	59,783	....	2,862	62,645	3,112	34,434	6.52
Totals	389,737	2,008,732	2,398,469	25,986	76,729	2,501,184	142,535	1,393,123	263.60

TABLE NO. 35.

Street Sprinkling Ordered for 1901.

WARDS.	ASSESSMENT.					FRONTAGE.							
	Per front foot.					ASSESSMENT.			EXEMPT.		TOTALS.		
	Paved st.	Dirt st.	Paved streets.	Dirt streets.	Total paved and dirt streets.	Paved streets.	Dirt streets.	Total paved and dirt streets	Paved streets.	Dirt streets.	Paved streets.	Dirt streets.	Paved and dirt streets.
	Cents.	Cents.				Feet.	Feet.	Feet.	Feet.	Feet.	Feet.	Feet.	Feet.
First	4	4	$1,054.32	$5,747.44	6,801.76	26,358	143,684	170,042	. . . .	2,849	26,358	146,533	172,891
Second . . .	4	4 & 3	1,774.82	5,391.21	7.166.93	44,370	136,600	180,970	5,948	7,307	50,318	143,907	194,225
Third	4 & 3	3	2,638.60	9,437.24	12,075.84	66,139	314,569	380,708	4,645	8,839	70,784	323,408	394,192
Fourth . . .	6 & 10	4	6,895.50	8,621.89	15,517.39	96.462	215,352	311.814	4,638	6,464	101,100	221,816	322.916
Fifth	4,4½,7,&10	4,4¼,& 7	4,611.95	7,222.39	11,834.34	87,252	170,213	257,465	5,369	6,805	92,621	177,018	269,639
Sixth	7	5	1,193.88	4,397.71	5,591.59	17,055	87,957	105,012	682	4,619	17.737	92,576	110,313
Seventh. . .	. . . . . .	4	. . . . . .	7,614 79	7,614.79	. . . . .	190,368	190,368	. . . .	8,223	. . . . . .	198,591	198,591
Eighth . . .	3 & 10	3 & 7	608.61	13.998.67	14,607.28	9,419	457,402	466,821	. . . .	8,252	9.419	465,654	475,073
Ninth. . . .	3.5	3.5	883.75	5,153.04	6.036.79	25,248	147,225	172,473	4,111	10,150	29,359	157,375	186.734
Tenth. . . .	4	4	178.63	3,236.71	3,415.34	4,466	80,917	85,383	. . . .	3,456	4,466	84,373	88,839
Eleventh . .	4.5	4.5	610.34	7,005.80	7.616.14	13,563	155,687	169,250	593	5,695	14,156	161,382	175,538
Twelfth. . .	. . . . . .	4	. . . . . .	1,815.96	1,815.96	. . . . .	45,397	45,397	. . . .	2,068	. . . . . .	47,465	47,465
Thirteenth .	. . . . . .	4	. . . . . .	2,370.39	2,370.39	. . . . .	59,257	59,257	. . . .	2,862	. . . . . .	62,119	62,119
Totals . .	5.23	3.72	$20,450.40	$82,013.24	$102,463.64	390,332	2,204,628	2,594,960	25,986	77,589	416,318	2,282,217	2,698,535

WARDS.	LENGTHS.			TEAMS.		
	Street insersections. Feet.	Total feet.	Miles 1000ths.	Average per team 1900.	Number Employed 1900.	Estimated number for 1901.
First	8,923	95,368	18 062	6,661	13	13
Second	12,719	109,831	20.801	8,214	13	13
Third	24,076	221,172	41 888	7,401	21	28
Fourth	20.810	182,268	34.520	6,434	26	27
Fifth	17,098	151,917	28.772	7,595	20	20
Sixth	8,375	63,531	12.032	6,355	10	10
Seventh.	10,120	109,415	20.722	7,737	14	14
Eighth	22,476	260,012	49.244	8,883	28	29
Ninth.	10,352	103,719	19.643	6,905	15	15
Tenth.	4,053	48,472	9.180	7,959	6	6
Eleventh	10,121	97,890	18.539	6,971	14	14
Twelfth.	3,360	27,092	5.131	7,047	3	4
Thirteenth	3,112	34,171	6.471	6,886	5	5
Totals	155,595	1,504,858	285.005	7,410	188	198

TABLE No. 36.

Street Commissioners' Work for 1900.

WARDS.	SPRINKLING.			*PAVED STREETS.					UNPAVED STREETS.			
	No. of teams.	Total No. of days.	Total cost.	Square yards of pavement January 1, 1901.	Cost of cleaning.	Cost of sweeping.	Cost of cleaning and sweeping.	Cost of cleaning and sweeping per Sq. Yd. per year. Cents.	Cleaning snow and ice.	Cleaning.	Repairing.	Total.
First	13	2,380	$7,304.00	94,362	......	$482.03	$482.03	.51	$ 78.75	......	$3,671.98	$3,750.73
Second	13	2,511	7,325.90	164,333	$447.32	62.00	509.32	.31	177.74	$2,930.68	1,172.25	4,280.67
Third	21	3,404	10,863.83	271,053	1,209.22	4,037.62	5,246.84	1.94	240.50	2,038.80	2,002.29	4,281 59
Fourth	26	5.331	16,632.56	375.860	4,147 60	10,059.43	14,207.03	†3.79	715.93	246.00	7,171.46	8,133.39
Fifth	20	4,120	12,153.77	303.682	5,142.91	1,611.56	6,754.47	†2.22	1,248.31	321.61	4,385.15	5,955.07
Sixth	10	1,948	5,885.95	80,575	1,425.20	......	1,425.20	1.77	364.21	922.24	848.98	2,135.43
Seventh	14	2,585	8,108.35	......	......	......	......	......	74.25	......	668.86	743.11
Eighth	28	4,714	14,883.45	30,244	141.43	......	141.43	†.47	476.84	3,876.97	2,537.95	6,891.76
Ninth	15	2,570	7,969.02	119.689	725.49	......	725.49	.61	60.00	112.40	3,085.25	3,257.65
Tenth	6	1,080	3,668.00	15,287	210.50	5.26	215.76	1.41	48.00	320.60	2,907.42	3,276.02
Eleventh	14	2,817	8,797.30	48,579	744.00	119.90	863.90	1.77	96.00	1,285.11	751.11	2,132.22
Twelfth	3	654	2,024.85	......	......	......	......	......	50.64	775.38	1,359.81	2,185.83
Thirteenth	5	879	2,761.13	......	......	......	......	......	187.34	795.83	665.27	1,648.44
Total	188	34,993	$108,378.11	1,503,664	$14,193.67	$16,377.80	$30,571.47	Av. 2.03	$3,818.51	$13,625.62	$31,227.78	$48,671.91

100.26 miles cost $304.92 per mile per year or including asphalt, $441.54.

*The cost under this heading is exclusive of hand cleaning and sweeping of asphalt streets.

†Cost including asphalt paving, 4th ward, 5.40 cents; 5th ward, 4.42 cents; 8th ward, 3.54 cents. Total average, 2.94 cents per square yard per year.

TABLE No. 36.—*Continued.*

WARDS.	Cost of crosswalks new and repairs.	SIDEWALK REPAIRS.			GRADING.			Total amount expended for ward purposes.	Valuation of tools and machinery.
		Cost of materials and incidentals.	Cost of labor.	Total cost.	Stone sidewalks.	Street.	Total cost.		
First	$262.55	$28.34	....	$28.34	$1,473.34	$1,089.51	$2,562.85	$14,390.50	$1,860.40
Second	476.68	439.63	....	439.63	1,097.00	859.44	1,956.44	14,988.64	1,689.60
Third	382.04	433.26	$776.87	1,210.13	2,151.97	1,636.71	3,788.68	25,773.11	2,146.75
Fourth	441.84	210.91	60.00	270 91	64.00	2,325.85	2,389.85	42,075.58	1,522.76
Fifth	1,620.06	76 36	....	76.36	1,070.82	....	1,070.82	27,630.55	1,527.65
Sixth	103.01	52.29	159.23	211.52	2,138.85	....	2,138.85	11,899.96	203.33
Seventh	49.20	7.80	209.50	217.30	392.10	2,463.14	2,855.24	11,973.20	157.05
Eighth	757.39	296.10	731.04	1,027.14	1,868.24	4,389.52	6,257.76	29,958.93	1,805.25
Ninth	108 24	54.46	53.25	107.71	1,544.21	19.38	1,563.59	13,731.70	234.96
Tenth	596.30	92.82	71.23	164.05	113.00	4,405.90	4,518.90	12,439.03	1,091.80
Eleventh	341.96	395.11	297.06	692.17	1,885.04	....	1,885.04	14,712.59	464.56
Twelfth	178.93	55.53	55.13	110.66	972.06	1,046.49	2,018.55	6,518.82	113.54
Thirteenth	240.08	88.56	....	88.56	315.38	3.009.81	3,325.19	8,063.40	394.92
Total	$5,558.28	$2,231.17	$2,413.31	$4,644.48	$15,086.01	$21,245.75	$36,331.76	$234,156.01	$13,212.57

TABLE NO. 37.

Cost of Cleaning and Sweeping Asphalt Paving During the Season of 1900.

The asphalt paving is swept by hand, using the "Boss" scraper, according to the block system. Each man has from two to five blocks to keep clean. The sweepings are deposited in galvanized iron cans placed at street corners, from which they are removed by teams. The asphalt paving is also swept by machine at night and flushed whenever necessary, but this work is not included in the table, except as to Park avenue. Teams are paid $3.00 and $3.50 per day, men $1.00 to $1.75 per day and $40.00 per month.

WARD.	STREET.	Total No. of square yards.	Cleaning, Machine Sweeping, Washing		Hand Sweeping.		Total amount cleaning and sweeping.	Cost per Square Yard per Year.		
			No. of teams.	Cost.	No. of men.	Cost.		Cleaning.	Sweeping.	Cleaning and Sweeping.
Fifth	Park avenue	25,167	1	$246.49	4	*$1,378.68	$1,625.17	$.0098	$.0548	$.0646
Eighth	Park avenue	17,839	1	464.29	2	†465.80	930.09	.0260	.0261	.0521
Total	Park avenue	43,006	. . . .	$710.78	. . .	$1,844.48	$2,555.26	$.0165	$.0429	$.0594
Fourth	All streets	99,340	2	$1,142.24	16	$4,946.75	$6,088.99	$.0115	$.0498	$.0613
Fifth	All except Park avenue	61,805	1	770.58	12	4,282.77	5,053.35	.0124	.0693	.0817
Total	And average	204,151	5	$2,623.60	34	$11,074.00	$13,697.60	$.0129	$.0542	$.0671

* $668.02 of this expended by Park Avenue Improvement Association.

† All of this expended by Park Avenue Improvement Association.

12,888 miles of 27 feet roadway cost $203.57 per mile per year for cleaning; $851.49 for sweeping, or total of $1,055.06.

TABLE NO. 38.

Bicycle Paths Built by the City Engineer During the Year 1900.

STREET.	From—	To—	Length in miles.	Cost.			
				Gravel.	Lumber and nails.	Labor.	Total.
Eleventh av N	Fourth st	Fifth st	0.07		$ 9.90	$51.00	$ 60.90
Eleventh st S	Fifth av	Portland av	0.08		14.79	62.16	76.95
Eighteenth av N	Second st	Sixth st	0.31		42.46	244.75	287.21
Fourth st N	Bdg. over R. R. tracks	Eleventh av N	0.52	$ 7.50	65.61	358.19	431.30
Fifth st S	Tenth av S	Riverside av	0.70		266.80	629.36	896.16
Fifteenth av S	Washington av	Fifth st	0.23		32.15	281.75	314.90
Harvard st	University av	Fulton st	0.45		88.58	399.28	487.86
Hennepin av	Harmon Place	Groveland av	0.28	21.00	46.09	354.16	421.25
Lake st W	Dean Boul.	Bridge over R. R. tracks	0.36			119.25	119.25
Lyndale av	Groveland av	Thirty-first st	1.41		272.65	1,172.64	1,445 29
Monroe st	Eighteenth av NE	Twenty-seventh av NE	0.75	59.00	133.51	461.22	653 73
Second st N	Twentieth av	Forty-second av	2.25	173.25	506.60	1,490.05	2,169.90
Sixth av SE	University av	Seventh st	0.30		45.60	229.82	275.42
Spring st	Harrison st	Pierce st	0.75		13.80	192.43	206.23
Pierce st	Spring st	Summer st					
Summer st	Pierce st	Lincoln st					
Thirteenth av S	Franklin av	Lake st	1.00	1.50	194.13	738.65	934.28
Thirteenth st	Nicollet av	Vine Place	0.15	9.41	33.96	67.80	111.17
Twenty-fifth av NE	Central av	Seventh st	0.52	4.25	102.73	332.00	438.98
Twenty-eighth st	Cedar av	Hiawatha av	0.31		4.79	190.24	195.03
University av NE	Third av NE	Broadway st	0.59	38.50	171.89	486.87	697.26
Vine Place	Thirteenth st	Groveland av	0.52	32.59	95.45	234.87	362.91
Washington av SE	Oak st	University av	0.22		54.88	188.77	243.65
Total			11.77	$347.00	$2,197.37	$8,285.26	$10,829,63
Repairs on old paths							434.33
Signs							33.88
Tools							142.39
Grand Total							$11,440.23

TABLE NO. 40.

Analysis of River Water.—Parts per Million.

Sample number.	Year 1900.	Source of supply.	Residue			Chlorine.	Hardness, degrees. (Clark's scale.)	Oxygen Consumed.			Ammonia free.	Ammonia Albuminoid.	Nitrates.	Nitrites.	Color.	Sediment.	Bacteria per cubic centimeter	Remarks.
			Volatile.	Fixed.	Total.			Ten minutes cold.	Sixty minutes cold.	Ten minutes boiling.								
227	January 10	N.	82	117	199	2.4	10.5	1.82	2.85	7.45	.087	.370	traces.	sl. tr. .	.85	M.		
227	January 10	R.	69	112	181	1.8	10.5	1.97	2.66	7.00	.062	.275	traces.	sl. tr. .	.8	S.	150	
228	January 25	N.	60	186	246	2.8	11.5	1.22	2.14	6.15	.087	.425	traces.	traces.	.7	M.	120	
228	January 25	R.	54	162	216	2.2	11.0	1.53	2.25	6.50	.087	.375	traces.	traces.	.6	S.	. . . . . .	
229	February 10 . . .	N.	50	193	243	1.8	11.5	.66	1.82	5.75	.062	.425	trace .	mod. .	.7	M.	80	
229	February 10 . . .	R.	50	180	230	2.2	11.8	1.04	1.78	5.55	.025	.350	trace .	trace .	.5	S.	109	
230	February 25 . . .	N.	55	165	220	2.0	12.2	1.12	1.55	4.30	.05	.325	trace .	trace .	.7	M.	20	
230	February 25 . . .	R.	45	155	200	1.9	12.0	1.06	1.55	4.70	.037	.235	trace .	trace .	.5	S.	18	
231	March 10	N.	60	207	267	2.5	13.5	1.28	2.03	5.55	.125	.325	trace .	sl. tr. .	.8	M.	35	
231	March 10	R.	45	188	233	2.3	12.7	1.20	1.72	5.95	.075	.275	trace .	none .	.6	S.	15	
232	March 22	N.	57	167	224	2.7	13.0	1.16	1.81	5.40	.075	.235	trace .	mod. .	.8	M.	2048	
232	March 22	R.	54	193	247	2.1	13.7	1.09	1.94	5.20	.025	.175	trace .	mod. .	.5	S.	576	
233	April 10	N.	39	158	197	2.0	12.0	1.01	1.82	5.65	.087	.375	traces.	high. .	.9	H.	1156	
233	April 10	R.	49	179	228	1.8	12.4	1.29	1.58	5.50	.100	.325	traces.	high. .	.8	S.	1109	
234	April 25	N.	44	199	243	1.8	15.0	1.11	2.25	5.30	.113	.650	traces.	traces.	1.2	H.	595	
234	April 25	R	31	134	165	2.7	13.0	1.17	1.70	5.00	.075	.530	traces.	traces.	1.1	M.	576	
235	May 10	N.	51	165	216	1.8	13.1	1.06	1.94	6.05	.087	.560	trace .	trace .	1.3	H.	1337 6	
235	May 10	R.	37	142	179	2.2	12.0	1.00	1.69	5.25	.075	.400	trace .	trace .	1.0	M.	1389.6	
236	May 25	N.	43	157	200	2.1	12.7	1.36	3.30	6.05	.094	.500	traces.	traces.	1.4	H.	915.2	
236	May 25	R.	44	153	197	2.0	12.7	1.11	2.11	5.17	.100	.375	trace .	trace .	1.2	M.	1024	
237	June 10	N.	34	156	190	1.6	13.3	2.05	3.27	7.65	.087	.425	trace .	none .	1.5	H.	1280	
237	June 10	W.	43	201	158	2.5	15.3	2.11	3.02	8.25	.300	.500	trace .	high. .	1.5	H.	1984	
237	June 10	R.	48	161	209	1.9	13.0	1.52	2.41	6.80	.018	.285	trace .	none .	.9	S.	3264	Specimens stood several hours before plates were made.
238	June 20	N.	48	180	228	1.6	15.5	2.08	3.20	7.60	.075	.450	traces.	none .	1.2	H.	134.4	
238	June 20	W.	46	144	190	2.0	16.5	2.13	3.55	9 20	.087	.500	traces.	traces.	1.3	H.	256	
238	June 20, ...	R.	40	160	200	1.2	14.5	1.80	3.13	8.65	.125	.575	traces.	traces.	1.3	M.	217.6	
239	July 10	N.	41	108	149	2.0	13.5	1.74	2.54	7.20	.075	.700	traces.	high. .	1.4	H.	2000	
239	July 10	R.	49	143	192	1.8	16.0	1.50	2.55	6.90	.050	.550	traces.	high. .	1.2	S.	1600	
240	July 25	W.	49	142	191	2.0	13.3	3.28	5.34	12.55	.125	.625	traces.	traces.	1.6	H.	1800	
240	July 25	E.	68	110	178	1.9	12.4	3.91	6.09	13.95	.137	.525	traces.	traces.	1.6	H.	8640	
241	August 4	N.	38	130	168	2.1	12.7	1.54	2.33	6.41	.100	.575	traces.	traces.	1.2	M.	774.4	

SEDIMENT.
M=moderate.
S=slight.
H=heavy.
VH=very heavy.

SOURCE OF SUPPLY.
N=North side station.
W=West side station.
E=East side station.
R=Reservoir.

TABLE No. 40.—*Continued.*

Saumple number.	Year 1900.	Source of supply.	RESIDUE.			Chlorine.	Hardness, degrees. (Clark s scale.)	OXYGEN CONSUMED.			Ammonia free.	Ammonia Albuminoid.	Nitrates.	Nitrites.	Color.	Sediment.	Bacteria per cubic centimeter	REMARKS.
			Volatile.	Fixed.	Total.			Ten minutes cold.	Sixty minutes cold.	Ten minutes boiling.								
241	August 4	W.	44	140	184	2.5	13.3	1.84	3.18	7.63	.137	.700	traces.	mod. .	1.3	H.	14784	
241	August 4	R.	33	141	174	2.0	12.5	1.42	2.20	6.10	.075	.500	traces.	traces.	1.1	S.	1344	
242	August 25.	N.	51	242	293	2.1	10.5	6,55	8.03	13.60	.050	.500	traces.	none .	1.6	H.	. . . . . .	
242	August 25.	W.	72	237	309	2.5	11.0	5.75	7.66	12.85	.100	.625	traces.	none .	1.5	H.	. . . . . .	
242	August 25:	R.	53	131	184	1.8	10.5	3 61	3.76	7.00	.125	.375	traces.	high .	1.4	M.	. . . . . .	
243	October 20	N.	69	161	230	1.8	9.5	3.93	5 83	16.55	.062	.250	traces.	none .	1.4	H.	300	Good.
243	October 20	R.	68	118	186	2.5	10.5	3.99	6.64	18.35	.165	.500	traces.	none .	1.7	M.	704	
244	October 20	N.	49	151	200	2.3	11.	3.91	5.59	14.55	.050	.535	trace .	high. .	1.5	H.	. . . . . .	
244	October 20	W.	57	145	202	2.9	11.5	4.41	5.88	15.70	.037	.600	mod. .	high. .	1.6	H.	2170	Absolutely bad.
244	October 20	R.	54	113	167	1.8	10.	3.96	5 30	14.65	.500	.300	trace .	high. .	1.1	M.	. . . . .	
245	November 8. . . .	N.	58	169	227	2.3	12.0	3.45	4.75	13,70	.037	.375	trace .	high. .	1.6	H.	480	
245	November 8. . . .	R.	67	121	188	1.8	10.	2.35	4.72	14.50	.075	.425	trace .	high. .	1.2	S.	720	
246	November 20 . . .	N.	80	199	279	2.0	11.	5.02	6.03	15.10	.137	.375	trace .	none .	1.7	V. H.	480	
246	November 20 . . .	R.	57	147	204	2.4	11.	4,10	5.44	13.55	.075	.350	trace .	trace .	1.3	M.	63.8	
247	December 10 . . .	N.	53	180	233	2.3	12.	2.17	3.38	10.10	.225	.400	traces.	traces.	1.3	H.	704	Should be filtered or boiled.
247	December 10 . . .	R.	54	160	214	2.4	11.5	2.31	3.52	10.05	.087	.350	traces.	traces.	1.1	M.	448	
248	December 25 . . .	N.	50	200	250	2.8	13.5	1.76	2.59	7.85	.150	.275	traces.	none .	1.4	H.	183	Good water.
248	December 25 . . .	R.	53	186	239	2.1	13.0	1.86	3.17	8.45	.100	.225	traces.	none .	1.1	M.	160	

Table No. 41.

Summary of all Watermains Laid Previous to January 1st, 1901.

Size in Inches.	Kind.	Feet.	Feet.	Miles.	Cost.
6	Cast Iron	719,712.1			
8	Cast Iron	272,601.6			
10	Cast Iron	16,484.2			
12	Cast Iron	200,758.1			
16	Cast Iron	83,449.4			
20	Cast Iron	930.0			
24	Cast Iron	85,173.9			
30	Cast Iron	915.2			
36	Cast Iron	21,693.4			
Total			1,401,717.9	265.48	$2,823,240.62
ADDITION'L AND HYDRANT CONNECTIONS					
2, 1.5, 1.25	Wrought Iron in Mill street	1,115.3			
6	Cast iron hydrant connections	25,550.4			
6	Cast iron in Anoka County	982.5			
4	Cast iron in Anoka County	1,109.2			
Total			28,757.4	5.44	$31,558.12
RESERVOIR PIPE LINES.					
16	Cast iron drain pipe	15,758.0			
50	Steel pipe	34,336.0			
Total			50,094.0	9.49	$349,642.71
Grand total			1,480,569.3	280.41	$3,204,441.45
Paid for by private individuals			3,270.0	0.61	2,490.14
Net total by city			1,477,299.3	279.80	$3,201,951.31

TABLE No. 42.

Comparative Cost Per Million Gallons Pumped for Repairs, Etc.

STATION NO. 1, WEST SIDE.

Year.	PUMP REPAIRS.		OIL AND PACKING.		TOTAL.		
	Amount.	Rate.	Amount.	Rate.	Million gallons.	Amount.	Rate.
1890	$112.10	$ .10 4-10	$56.33	$ .05 2-10	1,078,032,469	$168.43	$ .15 6-10
1891	173.59	.14 6-10	65.04	.05 4-10	1,189 640,678	238.63	.20
1892	55.13	.06 5-10	58.07	.06 8-10	843,260,944	113.20	.13 4-10
1893	188.52	.17 9-10	156.90	.15	1,049,153,760	345.42	.32 9-10
1894	47.97	.03 3-10	95.17	.06 5-10	1,455,079,430	143 14	.09 8-10
1895	425.71	.38 2-10	162.03	.14 5-10	1,114,588,900	587.74	.52 7-10
1896	1,158.50	1.09	203.54	.19 2-10	1,063,207,864	1,362.04	1.28 2-10
1897	220.12	.09 8-10	124.48	.05 6-10	2,226,644,000	344.60	.15 4-10
1898	221.16	.10 9-10	249.61	.12 4-10	2,018,552,850	470.77	.23 3-10
1899	268.87	.21 4-10	115.56	.09 2-10	1,252,433,085	384.43	.30 7-10
1900	128.80	.14 8-10	106.78	.12 3-10	870,685,000	235.58	.27 1-10
Total	$3,000.47	$ .21 2-10	$1,393.51	$ .09 8-10	14,161,278,980	$4,393.98	.31

STATION NO. 2 EAST SIDE.

1890	$42.09	$ .06 1-10	$13.50	$ .01 9-10	690,262,654	$55.59	$ .08
1891	135.45	.15 3-10	24.59	.02 7-10	886,096,000	160.04	.18
1892	65.99	.06 3-10	15.54	.01 4-10	1,051,979,280	81.53	.07 7-10
1893	432.62	.38 2-10	60.69	.05 4-10	1,132,200,000	493.31	.43 6-10
1894	236.53	.70 7-10	80.54	.24 1-10	334,477,020	317.07	.94 8-10
1895	84.47	.07 6-10	89.73	.08	1,120,895,280	173.20	.15 6-10
1896	1,137.83	1.05 6-10	111.42	.10 3-10	1,076,981,856	1,249.25	1.15 9-10
1897	446.43	.33 2-10	85.10	.06 3-10	1,343,855,000	531.53	.39 5-10
1898	737.00	.90 8-10	116.55	.14 3-10	811,437,632	853.55	1.05 1-10
1899	41.17	.11 5-10	13.88	.03 9-10	357,089,906	55.05	.15 4-10
1900	404.09	. . . . .	21.22	.34 6-10	61,278,800	425.31	6.94
Total	$3,763.67	$ .42 4-10	$632.76	$ .07 2-10	8,866,553,428	$4,296.43	$ .49 6-10

STATION NO. 3, NORTH SIDE.

1890	$5.00	$ .00 2-10	$943.19	$ .34 1-10	2,763,587,582	$948.19	$ .34 3-10
1891	6.08	.00 2-10	462.30	.14 7-10	3,135,676,400	468.38	.14 9-10
1892	15.53	.00 5-10	1,069.19	.32 1-10	3,333,400,560	1,084.72	.32 6-10
1893	1,087.39	.28 4-10	348.50	.10 6-10	3,827,802,960	1,435.89	.37 5-10
1894	945.83	.20 6-10	715.87	.15 6-10	4,582,983,600	1,661.70	.36 1-10
1895	608.34	.14 6-10	1,033.05	.25 1-10	4,115,926,080	1,641.39	.39 8-10
1896	388.37	.08 6-10	861.60	.19 1-10	4,508 269,920	1,249.97	.27 7-10
1897	820.84	.26 3-10	1,360.78	.43 6-10	3,120,477,000	2,181.62	.69 9-10
1898	896.63	.18 1-10	1,465.69	.29 7-10	4,941,598,000	2,362.32	.47 8-10
1899	1,831.64	.34 7-10	994.73	.18 8-10	5,275,270,575	2,826.37	.53 6-10
1900	1,281.15	.21 6-10	891.33	.15	5,931,171,400	2,172.48	.36 6-10
Total	$7,886.80	$ .17 3-10	$10,146.23	$ .22 3-10	45,536,164,067	$18,033.03	$ .39 6-10

Table No. 43.

Showing Capacity of One Reservoir Basin in Gallons for Every Tenth of a Foot in Depth.

Elevation.	Gallons in each tenth of a foot.	Total Gallons.	Elevation.	Gallons in each tenth of a foot.	Total Gallons.
294.0	....	1,258,693.47	301.0	212.281.51	15,295,803.12
.1	188,872.88	1,447,566.35	.1	212,624.56	15,508,427.68
.2	189,208.01	1,636,774.36	.2	212,967.92	15,721,395.60
.3	189,543.29	1,826,317.65	.3	213,311.35	15,934,706.95
.4	189 878.65	2,016,196.30	.4	213,655.08	16,148,362.03
.5	190,214.17	2,206,410.47	.5	213,998.96	16,362,360.99
.6	190,549.85	2,396,960.32	.6	214.342.99	16,576,703 98
.7	190,885.61	2,587,845.93	.7	214,687.24	16,791,391 22
.8	191.221.44	2,779,067.37	.8	215,031.65	17,006,422.87
.9	191,557.45	2,970,624.62	.9	215,376.27	17,221,799.14
295.0	191,893.52	3,162,518.34	302.0	215,721.05	17,437,520.19
.1	192,229.75	3,354,748.09	.1	216,066.05	17,653,586.24
.2	192,566.24	3,547,314.33	.2	216,411.28	17,869,997.52
.3	192,902.63	3,740,216.96	.3	216,756.65	18,086,754.17
.4	193,239.17	3,933,456.13	.4	217,102.18	18,305,856.35
.5	193,575.89	4,127,032.02	.5	217,447.93	18,521,304.28
.6	193,912.76	4,320,944.78	.6	217,793.83	18,739,098.11
.7	194,249.72	4,515,194.50	.7	218,139.95	18,957,238.06
.8	194,586.76	4,709,781.26	.8	218,486.30	19,175,724.36
.9	194,923.93	4,904,705.19	.9	218,832.87	19,394,557.23
296.0	195,261.28	5,099,966.47	303.0	219,179.45	19,613,736.68
.1	195,598.71	5,295,565.18	.1	219,526.32	19,833,263.00
.2	195,936.29	5,491,501.47	.2	219,873.41	20,053,136.41
.3	196,273.96	5,687,775.43	.3	220,220.66	20,273,357.07
.4	196,611.78	5,884,387.21	.4	220,568.13	20,493,925.20
.5	196,949,69	6,081,336.90	.5	220,915.75	20,714,840.95
.6	197,287.68	6,278,624.58	.6	221,263.52	20,936,104.47
.7	197,625.89	6,476,250.47	.7	221,611.51	21,157,715.98
.8	197,964.12	6.674,214.59	.8	221,959.73	21,379,675.71
.9	198,302.50	6.872,517.09	.9	222,308.07	21,601,983.78
297.0	198,641.04	7,071,158.13	304.0	222,656.69	21,824,640.47
.1	198,979.66	7,270,137.79	.1	223,005.43	22,047,645.90
.2	199,318.18	7,469,455.97	.2	223,354.40	22,271,000.30
.3	199,657.30	7,669,113.27	.3	223,703.51	22,494,703.81
.4	199,996.32	786,909.59	.4	224,052.85	22,718,756.66
.5	200,335.41	8,069,445.00	.5	224,402.34	22,943,159.00
.6	200,674.67	8,270,119.67	.6	224,751.98	23,167,910.98
.7	201,014.08	8,471,133.75	.7	225,101.92	23,393,012.90
.8	201,353.50	8,672,487.25	.8	225,451.92	23,618,464.82
.9	201,693.16	8,874,180.41	.9	225,802.25	23,844,267.07
298.0	202,032.89	9,076,213.30	305.0	226,152.71	24,070,419.78
.1	202,372.71	9,278,586.01	.1	226,503.32	24,296,923.10
.2	202,712.67	9,481,298.68	.2	226,854.16	24,523,777.26
.3	203,052.73	9,684,351.41	.3	227,205.14	24,750,982.40
.4	203,392.94	9,887,744.35	.4	227,556 36	24,978,538.76
.5	203,733.23	10,091,477.58	.5	227,907.72	25,206,446.48
.6	204,073.68	10,295,551.26	.6	228,259 30	25,434,705.78
.7	204 414.29	10,499,965.55	.7	228,611.03	25,663.316.81
.8	204,755.00	10,704,720 55	.8	228,962.99	25,892,279.80
.9	205,095.74	10,909,816.29	.9	229,315.18	26,121.594.98
299.0	205,436.68	11,115,252.97	306.0	229,667.51	26,351,262.49
.1	205,777.76	11,321,030.73	.1	230,019.99	26,581,282.48
.2	206,118.92	11,527,149.65	.2	230,372.69	26,811,655.17
.3	206,460.17	11,733,609.82	.3	230,725.55	27,042,380.72
.4	206,801.56	11,940,411.38	.4	231,078.63	27,273,459.35
.5	207,143.13	12,147,554.51	.5	231,431.94	27,504,891.29
.6	207,484.77	12,355,039.28	.6	231,785.39	27,736,676.68
.7	207,826.54	12,562,865.82	.7	232,139.00	27,968,815.68
.8	208,168.43	12,771,034.25	.8	232,492.82	28,201,308.50
.9	208,510.44	12,979,544.69	.9	232,846.88	28,434,155.38
300.0	208,852.56	13,188,397.25	307.0	233,201.08	28,667,356.46
.1	209,201.93	13,397,599.18	.1	233,555.43	28,900,911.89
.2	209,543.35	13,607,142.53	.2	233,910.08	29,134,821.97
.3	209,884.96	13,817,027.49	.3	234,264 81	29,369,086.78
.4	210,226.75	14,027,254.24	.4	234,619.76	29,603,706.54
.5	210,568.77	14,237,823.01	.5	234,974,94	29,838,681.48
.6	210,910.93	14,448,733.94	.6	235,330.26	30,074,011.74
.7	211,253.31	14,659,987.25	.7	235.685.81	30,309,697.55
.8	211,595.84	14,871,583.09	.8	236,041.51	30,545,739.06
.9	211,938.52	15,083,521.61	.9	236,397.36	30,782,136.42

558245A

TABLE No. 43.—*Continued.*

Elevation.	Gallons in each tenth of a foot.	Total Gallons.	Elevation.	Gallons in each tenth of a foot.	Total Gallons.
308.0	236,753.50	31,018,889.92	311.3	248,609.75	39,032,749.12
.1	237,109.73	31,255,999.65	.4	248,972.26	39,281,721.38
.2	237,466.17	31,493,465.82	.5	249,334.92	39,531,056.30
.3	237,822.84	31,731,288.66	.6	249,697.80	39,780,754.10
.4	238,179.67	31,969,468.33	.7	250,060.82	40,030,814.92
.5	238,536.71	32,208,005.04	.8	250,424.08	40,281,239.00
.6	238,893.91	32,446,898.95	.9	250,787.48	40,532,026.48
.7	239,251.32	32,686,150.27	312.0	251,151.11	40,783,177.59
.8	239,608.89	32,925,759.16	.1	251,514.89	41,034,692.48
.9	239,966.69	33,165,725.85	.2	251,878.89	41,286,571.37
309.0	240,324.70	33,406,050.55	.3	252,243.04	41,538,814.41
.1	240,682.80	33,646,733.35	.4	252,607.42	41,791,421.83
.2	241,041.19	33,887,774.54	.5	252,971.94	42,044,393.77
.3	241,399.73	34,129,174.27	.6	253,336.69	42,297,730.46
.4	241,758 42	34,370,932.69	.7	253,701 59	42,551,432.05
.5	242,117.34	34,613,050.03	.8	254,066.72	42,805 498.77
.6	242,476.40	34,855.526.43	.9	254,431.99	43,059,930.76
.7	242,835.69	35,098,362.12	313.0	254,797.49	43,314,728.25
.8	243,195.20	35,341,557.32	.1	255,163.14	43,569,891.39
.9	243,554.87	35,585,112.19	.2	255,529.01	43,825,420.40
310.0	243,914.68	35,829.026.87	.3	255,895.11	44,081,315.51
.1	244,274.72	36,073,301.59	.4	256,261.28	44.337,576.79
.2	244,634.90	36,317,936.49	.5	256,627.75	44,594,204.54
.3	244,995.32	36,562,931.81	.6	256,994.37	44,851,198.91
.4	245,355.95	36,808,287.76	.7	257,361.14	45,108,560.05
.5	245,716.74	37,054,004.50	.8	257,728.13	45,366,288.18
.6	246,077.67	37,300,082.17	.9	258,095.35	45,624,383.53
.7	246,438,83	37,546,521.00	314.0	258,462.72	45.882,846.25
.8	246,800.22	37,793,321.22	.1	258,830.24	46,141,676.49
.9	247,161.75	38,040,482.97	.2	259,197.98	46,400,874.47
311.0	247,523.51	38,288,006.48	.3	259.565.95	46,660,440.42
.1	247,885.42	38,535,891.90	.4	259,934.06	46,920,374.48
.2	248,247.47	38,784,139.37	.5	260,302.63	47,180,676.81

TABLE No. 44.

Watermains Laid During the Season of 1900.

The following named watermains were laid by the city by day work. The abutting property was assessed at actual cost not exceeding the cost of a six (6) inch main.

STREET.	From—	To—	Size in inches.	No. of extension.	Length in feet.	Cost.	Rate of assessm't per front foot. Cents
Bassett Place	8th av N	11th av N.	6	1,167	513.2	$502·76	49
Bedford st	Hamline av.	S line lot 14, Blk. 8, Prospect Park 2d Add. revised.	6	1.170	463.6	497.28	54
Bryant av N	23d av N	24th av N.	6	1,171	404.5	611.35	76
Bryant av S	W 35th st.	W 36th st.	6	1,172	628.9	775.99	62
Colfax av S	W 32d st	W 34th st.	6	1,173	1,222.4	1,423.02	59
Church st SE	Beacon st	Washington av	6	1,213	410.8	500.26	61
Dell Place	Forest av	A point 400 feet North.	6	1,222	440.1	501.47	*57
Essex st	Harvard st	Oak st.	6	1,174	851.0	983.04	58
Essex st	Erie st	Huron st	8	1,175	367.5	548.58	59
8th av S	Across 2d st.	W of 2d st pipe.	8	1,217A	38.2	265.87	$1.74
8th av S.	Pipe line S 2d st	E line lot 1, Blk. 102, Town of Minneapolis	12	1,217B	188.5	846.43	
8th av S.	E line lot 1, Blk. 102 Town of Minneapolis	Near Canal	12	1,217C	138.9	708.84	
11th av S	E Lake st	N line of Powder Horn Park	6	1,176	996.2	1,177.91	60
11th av SE	8th st	R. R. Tracks	6	1,177	453.1	613.97	68
Filmore st	17th av NE	20th av NE	8	1,178	1,403.3	3,210.49	$1.03
4th av S.	E 33d st.	E 34th st	6	1,179	615.3	721.58	59
5th av S.	E 33d st.	E 34th st	6	1,180	616.7	705.77	58
Fremont av.	Summit av	Douglas.	6	1,225	329.3	529.65	*81
Grand av S	W 33d st	W 35th st.	6	1,219	1,247.4	1,362.12	*55
Grand st NE	14th av	18th av	6	1,181	1,615.9	2,441.83	76
Hamline av	Bedford st	Cecil st	6	1,182	400.4	560.22	70
Huron st SE	Essex st	Fulton st	6	1.185	410.0	529.29	65
Huron st	Fulton st	Dartmouth st	12	1,186	861.5	1,924.41	64
Huron st	Dartmouth st	East of River Parkway.	8	1,218	823.8	1,343.54	68
Humboldt av	Lincoln av	W Franklin av	8	1,183	592.5	735.17	51
Humboldt av	W. 22d st.	W 24th st.	8	1,184	656.3	929.13	60
Irving av	Lincoln av	W Franklin av	6	1,187	615.9	836.33	68
Jewett Place	6th av N	8th av N	6	1,188	725.1	894.77	62
Minnehaha av	26th av S	E Lake st.	16	1,189	265.9	946.40	77
Malcolm av	4th st SE	38 ft. S of right of way of Great Northern	6	1,216	1,255.8	2,312.33	*92
Newton av	29th av N.	32d av N	6	1,190	1,374.4	1,601.67	59
19th av S	Present terminus.	77½ ft. S of S line of Bluff st.	6	1,223	85.1	184.63	*1.09
19th av NE.	4th st	5th st	6	1,191	361.9	1,293.37	1.79
19th av SE	Como av.	Talmage av.	6	1.220	650.0	664.55	*52

*To be assessed in the taxes for the year 1901.

TABLE NO. 44.—*Continued.*

STREET.	From—	To—	Size in inches.	No. of extension.	Length in feet.	Cost.	Rate of assessm't per front foot. Cents
Oakland av. . . .	E 28th st	E 29th st	6	1,214	702.5	$750.64	54
Oliver av	30th av N.	32d av N	6	1,192	715.7	943.68	66
Pillsbury av . . .	W Franklin av . .	W 26th st.	6	1,193	2,608.2	3,105.06	*60
Queen av	6th av.	To a point 29½ ft. N line of lot, 8, Bl. 1, Broderick's	6	1,194	987.0	1,244 39	64
Summit av	Hennepin av . . .	S Lyndale av . . .	12	1,195	288.2	1,177.70	$1.37
2d st SE.	1st av	2d av	6	1,212	384.8	498.55	65
2d av SE	2d st	University av. . .	6	1,211	466.0	706.10	76
6th st N	S line lot 8, Blk. 2, Morgan's addition.	41st av N	6	1,198	366.5	670.20	92
17th st N	Erie av	N line lot 13, Auditor's Sub. No. 20	6	1,196	362.3	418.87	58
17th av S	8th st	Franklin av. . . .	12	1,197	1,291.7	3,336.50	80
3d st S . . .	5th av.	6th av.	6	1,209	380.0	648.21	86
13th av S	1st st	Washington av . .	6	1,200	821.6	1,332.30	30
22d st.	Minnehaha av . .	22d av S	8	1,206	532.4	842.27	68
22d av N	N Irving av. . . .	Illion av	6	1,205	917.8	984.84	54
24th av N.	6th st	Lyndale av	6	1,204	456.5	634 27	70
26th st	31st av S	34th av S	12	1,207	1,065.9	2,592.51	72
27th av S.	Franklin av . . .	22d st.	6	1,210	706.1	862.23	62
28th av S.	8th st	Franklin av. . . .	6	1,202	880.2	1,092.75	63
28th st	Fremont av	Girard av.	6	1,203	284.6	436.17	77
30th av N.	W end lot 7, Blk. 11, Morrison's addition.	6th st	6	1,215	625.7	828.63	67
35th st	Blaisdell av	Pillsbury av. . . .	6	1,224	379.6	507.34	*67
38th st	3d av S	5th av S	16	1,201	977.2	2,968.08	78
Talmage av. . . .	19th av SE	25th av SE	6	1,221	2,087.1	2,733.53	*70
Taylor st NE. . .	Spring st	Summer st	6	1,208	612.3	865.11	71
Thomas av	23d av N	26th av N.	8	1,199	1.295.9	1,635.40	52
Totals. . . .	. . . .	. . . .	. . .	. . . . .	42,219 2	$65,499.35	. . .

SUMMARY.

	Size in inches.	Length in feet.	Cost.
Hydrant connections.	6	871.1	. . . .
Pipe.	6	31,431.5	$41,488.03
Pipe.	8	5,709.9	9,510.45
Pipe.	12	3,834.7	10,586.39
Pipe.	16	1.243.1	3,914.48
Totals	. . . . .	43,090.3	65,499.35
Incidentals and repairs.	. . . . .	. . . .	7,696.08
Grand total.	. . . . .	8.16 miles	$73,195.43

*To be assessed in the taxes for the year 1901.

TABLE No. 45.

Extensions and Additions Made to Electric Conduit System in 1900.

LOCATION.	From—	To—	CONDUITS.			DUCTS.		Number Manholes.
			Kind.	Total Length. Feet.	Length exclusive of manholes. Feet.	No.	Length in Feet.	
MINNEAPOLIS GENERAL ELECTRIC CO.								
Alley, blk 55, Town of Mpls	...	...	...	...	...	...	...	1
Alley, blk 179, Town of Mpls.	Riverside av	Manhole in alley	2½-inch iron pipe	145.5	141.0	2	282.0	1
Alley, blk. 179, Town of Mpls.	Manhole	Cable pole	2½-inch iron pipe	7.5	6.0	2	12.0	..
Cedar av.	Washington av	Fifth st	McRoy Vit. Clay pipe.	151.5	1,490.0	8	11,920.0	2
Cedar av at 2½ st	Manhole E'ly	Lot line	2½-inch iron pipe	20.0	18.5	2	37.0	..
Cedar av at 2½ st	Manhole E'ly	Cable pole	2-inch iron pipe	20.0	18.5	1	18.5	..
Cedar av at Third st	Manhole E'ly	Cable pole	2-inch iron pipe	6.0	5.0	1	5.0	..
Cedar av at Third st	Manhole W'ly	N. side Cedar av	McRoy Vit. clay pipe.	66.5	65.0	4	260.0	..
Cedar av at Sixteenth st	Manhole SW'ly	Cable pole	2-inch iron pipe	70.5	69.0	1	69.0	..
Cedar av at Fifth st.	Manhole E'ly	Cable pole	2-inch iron pipe	20.0	18.0	1	18.0	..
Eighth av N at Wash. av.	E'ly side of Washington ave	W'ly side of same	McRoy Vit. clay pipe.	75.0	72.5	4	290.0	..
First av N.	NE'ly side of Fifth st	SW'ly side of Sixth st	McRoy Vit. clay pipe.	481.0	474.9	4	1,896 0	1
Fourth st N bet. 1st & 2d avs	NE'ly side of Fourth st	SW'ly side of same	2½-inch iron pipe	62.0	60 0	2	120.0	1
Fourth st S bet Nic. & 1st avs	NE'ly side of Fourth st	SW'ly side of same	2½-inch iron pipe	48.0	48 0	1	48.0	..
Fifth st S	Hennepin av SE'ly	Manhole	McRoy Vit. clay pipe.	181.0	174.0	16	2,784.0	1
Fifth st S	Nicollet av NW'ly	Manhole	McRoy Vit. clay pipe.	330.0	324.0	8	2,592.0	..
Fifth st S bet. Hen. & Nic. avs	Manhole on NE'ly side.	Manhole on SW'ly side 5th st	McRoy Vit. clay pipe.	41.0	35.0	24	840.0	1
Hen. av bet. 4th & 5th sts	Manhole	...	...	...	...	...	...	1
Main st SE	Central av	Manhole bet. 2d & 3d avs SE	McRoy Vit. clay pipe.	1,708.0	1,678.0	36	60,408.0	5
Plymouth av at Wash. av.	E'ly side Washington av	W'ly side of same	McRoy Vit. clay pipe.	104.0	99.0	4	396.0	..
Riverside av	Cedar av	Nineteenth av S	McRoy Vit. clay pipe.	443.0	433.0	4	1,732.0	2
Second av N	Washington av	Third st	2½-inch iron pipe	377.0	377.0	1	377.0	..
2d av N bet. Wash. av & 3d st	Main Conduit	Lot line	2½-inch iron pipe	21.0	21.0	1	21.0	..
Sixth av S	Washington av	Fourth st	McRoy Vit. clay pipe.	897.0	882.0	8	7,056.0	3
Sixth av S	Nicollet av NW'ly	Metropolitan Music Store	2-inch iron pipe	123.0	123.0	1	123 0	..
Seventh av N	Washington av E'ly	Alley	McRoy Vit. clay pipe.	167.0	162.0	4	648.0	1
Third av N at Fourth st	SE'ly side of av	NW'ly side of same	2½-inch iron pipe	44.0	42.0	1	42.0	..
Tenth av N.	Washington av	Second st	McRoy Vit. clay pipe.	419.0	414.5	4	1,658.0	1
Tenth ave N at Wash. av.	E'ly side Washington av	W'ly side of same	McRoy Vit. clay pipe.	82.0	79.5	4	318.0	..
Washington av N.	Third av	Bridge over R. R. at Fourth av	McRoy Vit. clay pipe.	414.0	410.0	8	3,280.0	1
Washington av N.	S. side of bridge over R. R	N. side of same	3-inch iron pipe	164.5	159.5	8	1,276.0	1

TABLE NO. 45.—*Continued.*

LOCATION.	From—	To—	CONDUITS.			DUCTS.		Number Manholes.
			Kind.	Total Length. Feet.	Length exclusive of manholes. Feet.	No.	Length in Feet.	
Washington av N.	N. side of bridge over R. R.	Fourteenth av N	McRoy Vit. clay pipe	3,441.0	3,391.0	8	27,128.0	11
Wash. av N bet. 3d & 14th avs	Manholes	Cable poles	2-in iron pipe	209.0	187.0	1	187.0	. .
Wash. av N bet. 7th & 8th avs	E'ly side of av	W'ly side of same	McRoy Vit. clay pipe	73.0	70.5	4	282.0	. .
Total				11,775.5	11,552.0	. . .	126,123.5	32
Total miles				2.2302	2.1878	. . .	23.887	. .
MUNICIPAL SUBWAY.								
Alley, blk. 82, Town of Mpls.			1¼-in iron pipe	100.0	100.0	1	100.0	. .
Fourth st S	Corner of Third av	Basement new city hall	McRoy Vit. clay pipe	100.0	97.0	8	776.0	. .
Total				200.0	197.0	. . .	876.0	. .
Total miles				.0378	.0373	. . .	.1659	. .
MINNESOTA TRIBUNE CO.								
Fourth st S bet Nic & 1st av S.	NE'ly side Fourth st	SW'ly side of same	Pneumatic tube pipe	48.0	48.0	1	48.0	. .
Total				48.0	48.0	1	48.0	. .
Total miles				.009	.009	. . .	.009	. .
NORTH AMERICAN TELEGRAPH CO.								
Alley, blk. 31, Town of Mpls.	Fifth av N	Manhole in alley	McRoy Vit. clay pipe	89.0	84.5	4	336.0	1
Fifth av N.	Washington av	Alley bet. Wash. av & 2d st	McRoy Vit. clay pipe	166.0	163.5	4	654.0	1
Total				255.0	248.0	. . .	990.0	2
Total miles				.0482	.0469	. . .	.1875	. .
MISSISSIPPI VALLEY TELEPHONE CO.								
Alley, blk. 80, Town of Mpls.								1
Alley, blk. 108, Town of Mpls.	Tenth av S	Manhole	Terra Cotta	145.0	142.0	1	142.0	1
Alley, blk. 108, Town of Mpls.	Manhole	Cable pole	2-in iron pipe	10.0	8.0	1	8.0	. .
Alley, blk. 110, Town of Mpls.	Twelfth av S	Manhole	Terra Cotta	145.0	142.0	1	142.0	1
Alley, blk. 110, Town of Mpls.	Manhole	Cable pole	2-in iron pipe	10.0	8.0	1	8.0	. .
Cedar av	Two and One-half st	Riverside av	McRoy Vit. clay pipe	816.0	808.0	2	1,616.0	3
Cedar av	Riverside av	Fifth st	Terra Cotta	371.0	367.0	2	734.0	1
Colfax av	Franklin av	Douglas av	McRoy Vit. clay pipe	1,307.0	1,301.0	2	2,602.0	1
Eleventh st	Mary Place	Harmon Place	McRoy Vit. clay pipe	485.0	477.0	2	954.0	2
E. Franklin av	Nicollet av	Alley bet. 2d & 3d av S	McRoy Vit clay pipe	1,130.0	1,114.0	4	4,456.0	4

W. Franklin av	Nicollet av	Pillsbury av	McRoy Vit. clay pipe	810.0	798.0	4	3,192.0	2
W. Franklin av	Pillsbury av	Pillsbury av	McRoy Vit. clay pipe	86.0	82.0	8	656.0	1
W. Franklin av	Pillsbury av, S. of Franklin	Colfax av	McRoy Vit. clay pipe	2,739.0	2,719.0	4	10,876.0	5
W. Franklin av	Colfax av	Emerson av	McRoy Vit. clay pipe	643.0	633.0	2	1,266.0	2
First av S	Grant st	E. Fourteenth st	McRoy Vit. clay pipe	309.0	305.0	4	1,220.0	1
E. Fourteenth st	Nicollet av	First av S	McRoy Vit. clay pipe	359.0	355.0	4	1,420.0	1
W. Fourteenth st	Nicollet av	Vine Place	McRoy Vit. clay pipe	384.0	380.0	4	1,520.0	1
Groveland av	Vine Place	Pillsbury av	McRoy Vit. clay pipe	349.0	345.0	4	1,380.0	1
Harmon Place	Eleventh st	Spruce Place	McRoy Vit. clay pipe	1,192.0	1,184.0	2	2,368.0	2
Mary Place	Alley bet. Ninth & Tenth sts.	Eleventh st	McRoy Vit. clay pipe	626.0	618.0	2	1,236.0	2
Oak Grove st	Vine Place	Clifton Place	McRoy Vit. clay pipe	1,655.0	1,641.0	2	3,282.0	3
Pillsbury av	Groveland av	Franklin av	McRoy Vit. clay pipe	560.0	556.0	4	2,224.0	1
Pillsbury av	Franklin av	W. Twenty-sixth st	McRoy Vit. clay pipe	2,607.0	2,577.0	8	20,616.0	5
Riverside av	Cedar av manhole	E'ly lot line	McRoy Vit. clay pipe	19.0	17.0	2	34.0	. .
Spruce Place	Alley bet. Hen. av & Harmon Place	Alley bet. Yale Place and Grant st	Terra Cotta	770.0	758.0	1	758.0	3
Second st N	Point bet. 20th & 21st av N'ly	Alley	3-in iron pipe	83.0	83.0	1	83.0	. .
2½ st	Cedar av manhole	E'ly lot line	McRoy Vit. clay pipe	18.0	16.0	2	32.0	2
Third st N	Twentieth av	Twenty-first av	Terra Cotta	422.0	416.0	2	832.0	2
Third st bet. 20th & 21st av N	Manhole	Cable pole	2-in iron pipe	27.0	25.0	1	25.0	. .
Third st S	Manhole bet. 6th & 7th av S	Eleventh av	McRoy Vit. clay pipe	1,899.0	1,883.0	4	7,532.0	4
Third st S	Manhole bet. 9th & 10th av S	Cable pole	2-in iron pipe	6.0	5.0	1	5.0	. .
Third st S	Eleventh av	Twelfth av	Terra Cotta	415.0	411.0	3	1,233.0	1
Third st S	Twelfth av	Thirteenth av	Terra Cotta	411.0	407.0	2	814.0	1
Third st at Cedar av	East side	W. side Cedar av	McRoy Vit. clay pipe	70.0	68.0	2	136.0	. .
Tenth av S	Third st	Alley bet. Wash. av & 3d st	Terra Cotta	181.0	178.0	2	356.0	1
Twelfth av S	Third st	Alley bet. 3d st & Wash. av	Terra Cotta	184.0	181.0	1	181.0	1
Twentieth av N	E. end River bridge	W. end of same	3-in iron pipe	800.0	797.0	1	797.0	1
Twentieth av N	Manhole opp. sub. station	Sub station	McRoy Vit. clay pipe	26.0	24.0	10	240.0	. .
Twentieth av N	Manhole opp. sub. station	Third st N	McRoy Vit. clay pipe	255.0	251.0	4	1,004.0	1
Twenty-first av N	Third st N	Cable pole bet. 3d & 4th sts	2-in iron pipe	183.0	181.0	1	181.0	. .
E. Twenty-sixth st	Nicollet av	Alley bet. Stevens & 2d av S	McRoy Vit. clay pipe	822.0	812.0	4	3,248.0	3
W. Twenty-sixth st	Nicollet av	Alley between Lyndale & Aldrich av	McRoy Vit. clay pipe	2,811.0	2,773.0	4	11,092.0	10
W. Twenty-sixth st	Alley between Lyndale & Aldrich av	Alley bet. Bryant & Colfax av	McRoy Vit. clay pipe	650.0	642.0	2	1,284.0	2
Vine Place	Fourteenth st	Groveland av	McRoy Vit. clay pipe	1,682.0	1,666.0	4	6,664.0	4
Total				28,472.0	28,154.0	. . .	98,449.0	77
Total miles				5.3924	5.3321	. . .	18.6456	. .
N. W. TELEPHONE EXCH'GE COMPANY.								
Alley, block 14, Aud. Sub. & Wells, Sampson & Bell's Addition	Nicollet av	Cable pole	3-in iron pipe	283.0	277.0	1	277.0	2
Cedar av at Riverside av	Manhole	Cable pole at Riverside av	3-in iron pipe	140.0	138.0	1	138.0	. .
Cedar av at Riverside av	Manhole	Cable pole on Cedar av	3-in iron pipe	31.0	28.0	1	28.0	. .
Hennepin av at Seventh st	Main conduit	Lot line	3-in iron pipe	22.0	20.0	1	20.0	. .

TABLE NO. 45.—*Continued.*

LOCATION.	From—	To—	CONDUITS. Kind.	CONDUITS. Total Length. Feet.	CONDUITS. Length exclusive of manholes. Feet.	DUCTS. No.	DUCTS. Lengt in Feet.	Number Manholes.
Hennepin av at Thirteenth st	Manhole	Cable pole	3-in iron pipe	87.0	85.0	1	85.0	. .
Nicollet av	Twenty-sixth st	N. side Twenty-ninth st	Terra Cotta	1,839.0	1,809.0	9	16,281.0	5
Nicollet av	N. side Twenty-ninth st	S. side Twenty-ninth st	3-in iron pipe	146.0	140.0	9	1,260.0	1
Nicollet av	S. side Twenty-ninth st	Lake st	Terra Cotta	605.0	599.0	9	5,391.0	1
Nicollet av	Lake st	Thirty-first st	Terra Cotta	531.0	519.0	6	3,114.0	2
Nicollet av	Thirty-first st.	Thirty-second st	Terra Cotta	636.0	624.0	5	3,120.0	2
Nicollet av	Manholes	Cable poles	3-in iron pipe	686.0	656.0	1	656.0	. .
6th av S bet. Wash. av & 3d st	Manhole NW'ly side Sixth av	Manhole on private property	3-in iron pipe	140.0	138.0	1	138.0	1
Sixth st SE	Point near Central av	Third av SE	Terra Cotta	707.0	691.0	24	16,584.0	1
Sixth st SE bet 2d & 3d av.	Manhole	Substation	3-in iron pipe	32.0	29.0	48	1,392.0	. .
Seventh st S bet. Nic. & 1st av	NE'ly curb line	M'hole in alley & to cable pole	3-in iron pipe	177.0	173.0	1	173.0	1
Total				6,242.0	5,926.0	. . .	48,657.0	16
Total miles				1.1822	1.7223	. . .	9.2153	. .

TABLE NO. 46.

Summary of Table No. 45.

COMPANY.	"McROY" VITRIFIED CLAY PIPE.		"CAMP" TERRA COTTA PIPE.		2" & 3" WROUGHT IRON PIPE.		TOTAL LINEAL FEET.		Manholes.	Permits Granted.	Service connections.
	Conduit.	Duct.	Conduit.	Duct.	Conduit.	Duct.	Conduit.	Duct.			
Minneapolis General Electric Co.	10,258	123,488	. . . . .	. . . . .	1,293	2,636	11,551	126,124	32	21	2
Minnesota Tribune Co.	S. 48	S. 48	. . . . .	. . . . .	. . . . .	. . . . .	48	48	. .	1	. .
Mississippi Valley Telephone Co.	24,045	92,150	3,002	5,182	1,107	1,107	28,154	98,449	77	39	. .
Municipal Subway	97	776	. . . . .	. . . . .	*100	*100	197	876	. .	2	2
North American Telegraph Co.	248	990	. . . . .	. . . . .	. . . . .	. . . . .	248	990	2	1	. .
Northwestern Telephone Exchange Co.	. . . . .	. . . . .	4,243	44,490	1,684	4,167	5,926	48,657	16	8	1
Totals, feet	34,696	217,452	7,244	49,672	4,184	8,010	46,125	275,144	127	72	8
Totals, miles	6.571	41.184	1.371	9.407	.792	1.517	8.735	52.108			

S.—Sewer pipe. *—1¼ inch pipe.

Table No. 47.

Summary of Electric Conduit Constructed Prior to January 1st, 1901.

Company.	Vitrified Clay Pipe. L-"Lynch", S-"Sewer Pipe," Bal. is "McRoy."		"Camp" Terra Cotta Pipe.		†Dorsett {Light & Power} {Telep'n & Telegh}		Wrought Iron Pipe. 2 inch and 3 inch.		Wire Tubes. Edison.		Cement Lined Pipe.		Wooden Pipe.		Number of service connections.	Manholes	
	Conduit.	Duct.	Conduit.	Duct.	Conduit.	Duct.	Conduit.	Duct.	Conduit,	Duct.	Conduit.	Duct.	Conduit.	Duct.		Total.	Used Jointly.
	Lin. ft.	Lin. ft.	Lin. ft.	Lin. ft.	Lin. ft.	Lin. ft.	Lin. ft.	Lin. ft.	Lin. ft.	Lin. ft.	Lin. ft.	Lin. ft.	Lin. ft.	Lin. ft.			
neapolis Gen'l Elec. Co.	19,867	191,985	1,337	2,674	39,702	340,134	19,060	73,245	23,127	51,474	9,961	33,291	663	3,744	††† 4	**328	75
neapolis Int'l Elec. Co.	....	....	....	....	....	....	8,309	12,446	....	....	....	....	....	....	56	9	..
nesota Tribune Co. . .	S 48	S 48	....	....	....	....	....	....	....	....	....	....	....	....	1	....	..
sissippi Valley Tel. Co.	38,853	265,861	24,019	75,946	....	....	14,887	25,718	....	....	....	....	....	....	....	233	1
icipal Subway	97	776	....	....	10,197	10,197	12,019	15,605	....	....	....	....	631	631	*** 30	28	*36
thwestern Tel. Ex. Co.	L15,403	142,465	76,378	556,680	....	....	17,220	37,762	....	....	....	....	....	....	*.* 241	382	2
th Amer. Telegraph Co.	248	990	....	....	*†9,933	10,814	*†1,902	*† 1,893	....	....	....	....	....	....	12	3	43
th Star Woolen Mill Co.	....	....	....	....	....	....	1,434	1,434	....	....	....	....	....	....	....	6	..
nt'y Falls W. Power Co.	....	....	....	....	....	....	††1,449	†† 5,378	....	....	†† 35,234	72,504	....	....	6	83	83
n City Rapid Transit Co.	....	....	....	....	....	....	1,449	5,378	....	....	35,234	72,504	*§ 21,327	376,424	....	73	83
t'n Union Telegraph Co.	....	....	....	....	....	....	6,992	17,421	....	....	....	....	....	....	§§ 7	19	1
Total	74,516	602,125	101,734	635,300	39,702	340,134	81,370	189,009	23,127	51,474	45,195	105,795	22,621	380,799	357	1,164	324
Total miles	14.111	114.019	19.268	120.322	7.520	64.419	15.411	35.797	4.380	9.748	8.560	20.037	4.284	72.121	....	....	..

Grand Total Miles of Conduit is 73.531; of Duct, 436.502.

All the conduits were put in for the use of the companies except the "Dorsett"† which was put in by the National Subway Co., for the purpose of renting space to any trical company. Space was provided for the city, for its Police and Fire Alarm Telephone wires, free of charge. Vitrified Clay Pipe, formerly used by the Northwestern phone Exchange Company, is rectangular in form and contains two (2) compartments into each of which six (6) cables are drawn.

McRoy Vitrified Clay Pipes are rectangular in form with two (2), four (4) or more circular ducts; all McRoy pipe laid in 1900 has been two (2) and four (4) duct, laid on rete, joints of burlap soaked in asphalt, or joints laid in concrete. The Terra Cotta Pipes are square with one (1) three (3) inch circular duct in the center and are laid in ent so that any required number of ducts can be made. The Dorsett Conduit is made of an asphalt composition and rectangular blocks, about three (3) feet in length, laid end nd and containing the required number of circular ducts into which the wires are drawn. The three (3) inch wire tubes are made by placing in them three (3) wires and filling with an insulating compound; they are placed end to end and connections are made at each joint. The required number of cement lined pipes is placed in a den box and the entire surrounding space filled with cement concrete.

*§ The Twin City Rapid Transit Company's conduit is made of creosoted wood box, in which is placed the required number of paper tubes, and the surrounding space filled a pitch composition.

§ Carrying Fire Alarm and Police Telephone wires. §§ Only at Terminal Poles. * Two (2) Northwestern Telephone Exchange Co; thirty-four (34) Dorsett used. eased to the company, includes thirty-eight (38) feet conduit and seventy-one (71) feet duct, built by North American Telegraph Co., in 1898. † This conduit is now owned he Minneapolis General Electric Co.

** { 136 manholes on Dorsett system.
37 manholes on Cement lines.
68 manholes on Iron Pipe lines.
14 manholes on McRoy Conduit lines. } On the Wire Tube system there are 34 Junction boxes.

††† From Terminal Poles in Alleys. †† Owned and controlled by St. Anthony Falls Water Power Co. *.* Balance made from Cable Poles in Alleys.

*** This includes { 7 Cable boxes for all Aerial lines.
3 Distributing boxes in Areaways.
8 Police boxes.
10 Fire Alarm boxes. } All in Subway district.

TABLE No. 48.

General Summary by Companies of Conduits Constructed Prior to January 1st, 1901.

COMPANIES.	CONDUIT.		DUCT.	
	Feet.	Miles.	Feet.	Miles.
Minneapolis General Electric Company . . .	113,725	21.538	696,546	131.921
Minneapolis International Electric Company.	8,309	1.571	12,446	2.357
Minnesota Tribune Company	48	.009	48	.009
Mississippi Valley Telephone Company . . .	77,800	14.727	367,536	69.609
Municipal Subway.	12,747	2.414	17,012	3.222
Northwestern Telephone Exchange Company	109,002	20.643	737,007	139.584
North American Telegraph Company.	248	.047	990	.187
North Star Woolen Mill Company.	1,434	.271	1,434	.271
St. Anthony Falls Water Power Company . .	36,683	6.948	77,882	14.750
Twin City Rapid Transit Company	21,327	4.039	376,424	71.292
Western Union Telegraph Company	6,992	1.324	17,421	3.300
Totals.	388,315	73.531	2,304,746	436.502

TABLE NO. 49.

Work Done by Office Division in 1900.—Plans, Maps, Etc.

KIND.	Sewer Department.				Bridge Dep't.			Water Department.			General Department.					Totals.	
	Sewer.	Miscellaneous	Machine.	Square feet.	Bridges.	Miscellaneous	Square feet.	Water mains.	Miscellaneous	Square feet.	Street openings.	Court.	Sections.	Miscellaneous.	Square feet.	Number.	Square feet.
M'nted plats	49	.	. .	98	.	.	. .	. .	4	36	48	4	1	33	155	139	289
Unm'nted "	4	1	9	72	3	1	32	.	11	80	. .	28	. .	781	768	839	952
Tracings . .	58	1	4	170	.	.	. .	57	42	136	6	5	5	66	278	244	584
Blue-prints .	7	.	5	26	2	1	20	31	112	868	. .	20	264	82	1,742	524	2,656
Profiles . . .	49	.	. .	98	1	.	2	. .	. .	. . .	. .	. .	. .	1	1	51	101
Totals. .	167	2	18	464	6	2	54	88	169	1,120	54	57	270	963	2,944	1,796	4,582

MISCELLANEOUS WORK.

	No.
Specifications	575
Resolutions annulling	125
Resolutions ordering	130
Resolutions vacating	11
Resolutions street opening	17
Resolutions contracts	10
Ordinance change of grade	2
Ordinance roadways	22
Motions	53
Communications	10
Reports	276
Permits:—Sidewalk, curb and gutter	3,395
Permits:—Curb and paving removal	6
Permits:—Conduit	72
Permits:—Electric pole	169
Assessment rolls	1,243
House number certificates, 12,137 to 14,023	1,886
Paving repair notices	556

TABLE NO. 50.

Special Assessments.

	TAX OF 1899.			REBATES.								TAX OF 1900.		
					TAX OF 1899 AND PREVIOUS YEARS.									
	Amount of assessments.	No. of descriptions.	No. of rolls.	Annulments, amounts.	No. of descriptions.	No. of certificates.	No. of refundments.	Total.	Amount of certificates.	Amount of refundments	Total.	Amount of assessment.	No. of descriptions.	No. of rolls.
Sprinkling	$95,639.10	41,603	544	$1,417.82	761	299	183	482	$869.97	$755.15	$1,625.12	$102,463.64	44,321	579
Sidewalk	176,678.68	5,993	498	47,491.34	1,380	3,223	522	3,745	45,546.33 ‡42,050.17	7,781.99 8,093.06	53,328.32 50,143.23	251,628.84	7,551	479
Sidewalk repairs	† 2,518.99 * 1,920.50	3,865 380	10 12									†1,139.25 *1,477.88	1,677 252	6 10
Sewers	75,428.25	1,136	34	21,252.34	157	106	69	175	3,983.11	1,952.75	5,935.86	118,651.75	1,288	46
Paving	65,991.71	419	19									127,734.38	681	13
Curb	22,879.11	813	16									18,761.83	753	29
Curb repairs												2,851.37	132	5
Watermains	1,059.38	35	2			46	18	64	3,191.38	458.86	3,650.24	39,210.76	1,304	50
Re-assessments	333.42	10	7									2,097.71	298	18
Street opening	4,805.00	800	8									2,336.00	192	4
Sewer and water house connections	1,259.00	25	1									9,415.25	114	4
Totals	$448,517.14	55,079	1,151	$70,161.50	2,298	3,674	792	4,466	$95,640.96	$19,041.81	$114,682.77	$677,768.60	58,563	1,243

†Plank. *Stone. ‡Built by owner.

Total cost of making special assessments and maintaining records of same in the office of the city engineer, 1900	$3,652.50
Total amount paid county auditor for making entries on county books from 1899	3,117.25
Total cost	$6,769.75

SEP 24 1931